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Training Departments in the State Normal Schools in the United States

LESTER M. WILSON

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TRAINING DEPARTMENTS

In

STATE NORMAL SCHOOLS

In the United States

By

LESTER M. WILSON

Submitted in Partial Fulfillment of the requirements for the Degree of Doctor of Philosophy in the Faculty of Philosophy, Columbia University

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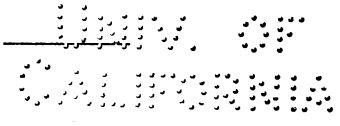
Published by

THE EASTERN ILLINOIS STATE NORMAL SCHOOL

Charleston



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TRAINING DEPARTMENTS IN STATE NORMAL SCHOOLS IN THE UNITED STATES.

I.

Introduction.

In common with other forms of vocational education the preparation of teachers requires a curriculum made up of subjects of study which will contribute to the development of the desired skill, and for the exercise, under supervision, of the skill in question. Vocations differ among themselves in the definiteness of the skill involved. In some vocations the conditions under which the skill is to be exercised are relatively fixed and can be so definitely foreseen that the skill can be made effective by being highly mechanized through training. In others the conditions to be met are so variable, so impossible to foresee in detail, that the skill in a large measure cannot be mechanized and the preparation for the vocation consists not in definite training but in education which is designed to prepare the individual to meet and to deal intelligently with variable conditions in the field of his vocation.

The vocations commonly called professions involve some situations which may be prepared for in the first way; they involve more which can be prepared for only in the second. Preparation for these professions consists in gaining the wide range of knowledge germane to the problems of the vocation, and practice in the application of this knowledge to concrete situations. The purpose of both is (1st) to train the novice in technique through doing in the practice period certain things which will be duplicated in later actual exercise of the vocation, and (2nd) to develop resourcefulness in applying technical knowledge to concrete situations, and exercise which, it is hoped, will prepare him to meet new conditions similar in only a general way to the conditions encountered during the practice period.

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Whatever may be the level upon which vocational skill is to be exercised, vocational education must be organized about opportunities for the exercise of that skill. The weakness of existing agencies for vocational education, Dr. Snedden believes, lies in the lack of facilities for giving opportunity for participation in the activities of the vocations. He says:[1]

"Modern experience as well as theory tends to demonstrate that vocational education which ignores or slights this phase of practical training is largely futile. Furthermore, the same experience seems to indicate that the concrete and practical must not follow at a considerable distance technical and general vocational subjects but rather accomapny and in many cases precede the same. * * * So far as the rank and file of students is concerned it is increasingly evident that the more abstract studies, when not intimately correlated with concrete practice, fail to work out into the results expected. * * * It is furthermore becoming more and more evident that the technical subjects, such as mathematics, drawing, physical science, art and the rest, have a genuine functional value in vocational education only when they are closely integrated with the educational results acquired through participation in the productive processes themselves. It is probably psychologically true that, for the average person, the study of these applied arts and sciences, quite apart from and anterior to any participation in the productive processes, is futile and unproductive so far as vocational efficiency is concerned. Nothing can be more certain, however, than that the study of these same subjects, in close relation with the productive processes tends to expand rapidly the capacity of the worker. We may then base on these considerations a tentative theory of vocational education.

"When the time arrives in the development of the boy or girl when he should seriously undertake preparation for a calling, it is necessary that somehow and somewhere he should be able to devote a considerable time to actual participation in the concrete processes of the calling itself. * * * Having thus come into contact with reality, he should have time set apart in which to study the more theoretical aspects of the calling. Here again, however, a sound theory would seem to require that mathematics, science, art, history and other related subjects should not require such an order of presentation as to detach them from the experience of the young worker. This has undoubtedly been the vice

[1] David Snedden—The problem of Vocational Education, pp. 27ff.

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of a great deal of the technical study carried on in the schools for the purpose of supplemental education."

The necessity for the organization of vocational education about actual participation in the concrete processes of the vocation has been recognized in the provisions of the Smith-Hughes act furnishing federal aid for vocational education. Section 11 provides that for persons not already employed in the exercise of their vocation at least one-half of the instruction given under the provisions of the act shall be given to practical work on a useful or productive basis. In answer to the question, "What is the policy of the board toward the provision in section 9 for 'Well rounded courses of study'?" the Federal Board for Vocational Education replied:[1]

"The act requires that a specified time be devoted in day schools to practical work. In addition, time sufficient for proper teaching must be given to instruction in related or technical subjects which are also vocational. The remaining time should be given to non-vocational subjects 'necessary to build a well-rounded course of instruction'.

"While not making at this time a definite and final ruling, the board points out that the experience in vocational education in agriculture and in trades and industries gained in this country during the last ten years has established the following as the prevailing practice:

"(a) In day industrial or trade schools at least one-half the time is given to practical work on a useful or productive basis.

"(b) From 30 to 35 per cent of the time in such schools is given to related studies like mathematics, drawing and science.

"(c) The remainder of the time (15 to 20 per cent) is given to such subjects as English, civics, hygiene and history.

"(d) In day agricultural schools one-half of the time is given to such subjects as agronomy, soil physics, animal husbandry, etc., including required, supervised practice in agriculture.

"(e) The remaining half of the time in such schools is given to non-vocational subjects."

In the preparation of physicians and surgeons the last two years of four-year curricula are given almost entirely to clinical and hospital experiences. The most serious defect found in medical schools in the United States by Flexner in his investigation of

[1] Second Annual report of the Federal Board for Vocational Education, p. 128.

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these schools in 1910 was the inadequacy of clinical and hospital facilities and the failure to make adequate use of the facilities even then available. The report of this investigation includes the following statements:

"On the pedagogical side, modern medicine, like all scientific teaching, is characterized by activity. The student no longer merely watches, listens, memorizes; he *does*. His own activities in the laboratory and in the clinic are the main factors in his instruction and discipline. An education in medicine nowadays involves both learning and learning how; the student cannot effectively know unless he knows how."[1]

"Clinical teaching has had substantially the same history as anatomical teaching. It was first didactic; the student was told what he would find and what to do when he found it. It was next demonstrative; things were pointed out in the ampitheater or the wards, those who got front seats seeing them more or less well. Latterly it has become scientific; the student brings his own faculties into play at close range—gathering his own data, making his own constructions, proposing his own course, and taking the consequences when the instructor who has worked through exactly the same process calls him to account; the instructor no longer a fountain pouring forth a full stream of knowledge, nor a showman exhibiting marvelous sights, but by turns an aid or an antagonist in a strenuous conflict with disease."[2]

"It is a nice question as to how the student's time in the third and fourth years is to be apportioned between patient work, ward work, demonstrative and class exercises, and didactic lectures. * * * The principle upon which division may be made has been, however, very clearly stated by Cabot and Locke. 'Learning medicine is not fundamentally different from learning anything else. If one had one hundred hours in which to learn to ride a horse or to speak in public, one might profitably spend perhaps an hour (in divided doses) in being told how to do it, four hours in watching a teacher do it, and the remaining ninety-five hours in practice, at first with close supervision, later under general oversight'."[3]

In the professional preparation of engineers the present tendency is toward a reduction of emphasis upon shop and field technique and an increase of emphasis upon the managerial and

[1] Bulletin Number Four, Carnegie Foundation for the Advancement of Teaching, p. 53.
[2] Ibid, p. 93.
[3] Ibid, p. 99.

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executive aspects of the profession, involving a corresponding change in the type of practical experience which the engineering schools must furnish. But there is no disposition to decrease the amount of practical experience. In its report to the conference of the British Institute of Civil Engineers on education and training of engineers, the committee said:

"No man can be considered fit to take part in the design as well as the control and direction of engineering works, unless there is added to competent scientific knowledge a thorough practical training under actual engineering conditions."[1]

This principle, that active participation in the vocation being learned is the characteristic feature of professional preparation for the exercise of a vocation, shown by theory and by experience to be valid in other fields of vocational education, has been found to be equally applicable to the professional preparation of teachers for American public schools.

That its validity has been accepted in practice is indicated by the fact that a training department is maintained by every state normal school in the United States and by a considerable number of private normal schools. It is indicated by the fact that training schools have been organized and arrangements for the use of public schools as training schools have been made by many colleges and universities which undertake to prepare teachers.

Persons responsible for teacher preparation have gone on record repeatedly as believing in the importance of the training department.

At the winter session of the National Education Association in 1899 a committee appointed in 1895 to investigate teacher training made its report to the Normal School department. In the report appear the following sentences:

"The training school should be the correlating center of the normal school; the curriculum of the training school should directly influence that of the normal school."[2]

"In comparison with other lines of work in the normal school, actual teaching is capable of ranking as the most valuable course for the student."[3]

[1] Nature, July 13, 1911, p. 49.
[2] N. E. A. Addresses and Proceedings, 1899, p. 852.
[3] Ibid, p. 846.

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The progress made by this idea in the minds of normal school administrators and teachers in the course of the ten years following is indicated by the following quotations from an address made before the Normal School department of the N. E. A. in 1909 by C. B. Robertson:[1]

"The progress [made by normal schools] which has been most marked, it seems to me, is the increasing appreciation in which the training departments are held. They are coming into a position of authority and power because their place, function, and value have been shown.

"There is no longer any question in the minds of those competent to judge, that the place of the training department is pivotal; it is the hub from which should radiate all the activities of the other departments."

In 1914 the same idea was reaffirmed by at least three speakers at the meeting of the Normal School department. W. T. Carrington, then president of the State Normal School at Springfield, Missouri, said:[2]

"We consider the training school work the most important work of the normal school and one of the most difficult to handle."

President John W. Cook of the Northern Illinois State Normal School said:[3]

"The position of [director of training] is second alone in importance to that of head of the school, if it is not, indeed, superior to it. The practice school is peculiarly the center of the situation. In a very true sense, the normal school should be built around the practice school."

President David Felmley of the Illinois State Normal University, said:[4]

"Where the training school is closely connected with the normal school, where the normal school departments write its course of study and give continuous attention to its work, where the normal school instructors have themselves had experience as public school teachers and see the children beyond the inchoate teachers on the benches in front of them, the training school imparts to the work of the whole institution a vigor and vitality which can be obtained in no other way."

[1] N. E. A. Addresses and Proceedings, 1909, p. 561.
[2] N. E. A. Addresses and Proceedings, 1914, p. 537.
[3] Ibid, p. 542.
[4] N. E. A. Addresses and Proceedings, 1914, p. 504.

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Among the theses "fundamental to the organization and administration of the suggested curricula" which preface the provisional "Curricula Designed for the Training of Teachers for American Public Schools," issued by the Carnegie Foundation in 1917, appears the following:[1]

"The organization of a teacher training college should represent a thoroughgoing integration of all courses around actual work of teaching as a center. To this end the training department should be the central department of the college, and all courses in the institution should be correlated as closely as possible with the work in observation and practice teaching."

In the report of the committee of the National Council of Normal School Presidents and Principals, on Normal School Standards and Surveys, the assertion is made:[2]

"The training school is the heart of the normal school. Around it and for it is everything else builded and ordered, for in and through the training school is exemplified the idea of education for which the normal school stands and in and through the training school the student's ideals, knowledge and teaching skill are brought into concrete reality."

In an article on "Practice Teaching in State Normal Schools" Wm. A. Wilkinson says:[3]

"It is a well established principle of vocational pedagogy that the best method of imparting both skill and technical knowledge needed in any occupation is through actual participation by the candidate in the vocation being learned. If the normal school accepts this principle, then it must make practice teaching the heart and core of its professional work."

Such quantitative studies as have been made to determine the value of the student's experience in the training department of the normal school contribute to the certainty that this principle of vocational education, participation in the processes of the vocation being learned, is valid in the field of teacher preparation.

Meriam[4] found a correlation of + .443 between success in practice teaching as indicated by grades received by student teach-

[1] Curricula Designed for the Professional Preparation of Teachers for American Public Schools—Carnegie Foundation for the Advancement of Teaching, 1917, Thesis 8.
[2] Educational Administration and Supervision, March, 1918, p. 166.
[3] Educational Administration and Supervision, June, 1918, p. 290.
[4] J. L. Meriam; Normal School Education and Teaching Efficiency, 1905.

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ers, and the teaching success of the same persons as indicated by the judgment of the principal of the normal school from which each had graduated. This correlation shows that practice teaching success is a fair index to probable success in later teaching, if it is allowed that the measurements of the two facts used in the study are adequate measures. It does not prove that practice teaching contributed largely to later teaching success, since it may be urged that the same preparation and native ability which contributed to success in one situation had a similar influence upon success in the second similar situation, independently of exercise of that preparation and native ability in the practice school. A positive correlation was found between other work done in the normal school and both practice teaching and public school teaching, the coefficient being somewhat lower in the second case. Meriam's own conclusion from the facts found is:

"The various subjects seem to contribute much to efficiency in practice teaching but considerably less to actual teaching; but the correlation between practice teaching and actual teaching is again comparatively high. This means that there is an element in the former that contributes directly to the latter. * * * School work is not so closely related to the work the teacher is later called upon to do as it should be. Practice teaching is more closely related to it than are the theoretical studies. * * * The significance of this is that more practice teaching is needed in training teachers."

A study of the value of practice teaching in training teachers for secondary schools has been made by H. G. Childs. Information of two sorts was collected. Nineteen city superintendents reported upon as many teachers who had done practice teaching as a part of their preparation. The summary of these reports is:[1]

"Ten of the 19 teachers were decidedly above the average of all teachers in the teaching staff; 17 of the 19 were equal to or above the average for all; but two were below the average and none were reported unsatisfactory. The comparison with other teachers with no previous teaching experience is still more striking, as 14 of the 19 were rated decidedly above the average; only one was rated below the average and none were rated as unsatisfactory."

[1] Bureau of Education Bulletin, 1917, No. 29, p. 35.

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The second type of information collected came from the reports of 79 teachers who had done practice teaching as to the value of practice teaching a preparation for later teaching. Sixty-nine of these reported that it had much value; eight that it had moderate value; two that it had little value.[1]

The second study seems to be more trustworthy than the first, since no report is given in the first as to what training, in other respects than practice teaching, had been given to the persons with whom the group considered was compared, and there was available for comparison no control group made up of persons of comparable ability and training equivalent excepting for the omission of practice teaching. In the second case the only persons who could evaluate the contribution made to teaching ability by practice teaching were consulted, namely the persons who had done the practice teaching.

Data comparable with those used in the second of these two studies just cited were collected from elementary school teachers in the course of the present study.

Fifty-two normal school graduates, experienced as elementary school teachers, each distributed 100 points among the following factors:

1. Academic courses.
2. Professional courses.
3. Observation of teaching.
4. Practice teaching.

The points were assigned to the four sorts of work in the proportion which the person making the distribution believed that each had contributed to the preparation for teaching which he had received in the normal school attended. These 52 persons included graduates from 28 schools in 14 states. The median teaching experience was 8 years. All had done or were doing, advanced work in preparation for teaching.

[1] Ibid, p. 34.

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The following distribution shows the nature of the reports:

	Median value assigned.	Range of distribution.	Average deviation.
1. Academic courses.....	27.5	0—70	11.2
2. Professional courses.....	22.5	0—60	8.7
3. Observation	12.5	0—35	7.2
4. Practice teaching.....	35	5—75	6.4

The higher median together with the lower average deviation for the estimates of the value of practice teaching as compared with the value of the other factors, indicates some agreement that practice teaching has a rather high value in preparation for teaching.

The high average deviations in all four cases seem to indicate two things:

(1) A wide difference in the value of the four sorts of work as they are administered in different schools. This is confirmed by the remarks added to the reports in certain cases. One of the four graduates from a certain state normal school who were among the 52 persons, rated the four factors 20, 60, 10, 10 respectively and said: "This particular school was strong in its professional work but formal and rigid in its practice department." A graduate from another state normal school, rating the four factors 10, 0, 20, 70 respectively, said: "The practice teaching was the only work which seemed to me to be vitally connected with preparation for teaching." A graduate from a third State Normal School rating the factors 10, 20, 20, 50, said: "I had the A. B. degree when I entered the normal school. Practice teaching was done in city schools under real, everyday conditions."

(2) The large deviations indicate a difference in the needs which different persons feel upon entering a normal school. The last quotation given above illustrates this, as does the following from another graduate from the first school mentioned, who rated the four factors 60, 5, 15, 20 respectively: "Points 2, 3 and 4 would have been valueless without 1. Not worth 40 points standing alone." A graduate from a fifth State Normal School rating the factors 35, 15, 15, 35, said: "It is hard to decide between academic work and teaching; I was so poorly prepared when I went to the Normal School that I needed the first badly but the

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practice teaching made what I learned useful as preparation for teaching."

A study has been made at the State Normal School, Winona, Minnesota, to determine how graduates of that school estimate the value of different parts of the curriculum. The following quotation indicates the nature of the investigation and its results:[1]

"In order to determine the relative values which graduates of the school attach to different subjects or aspects of the curriculum, some 40 women graduates of from six to ten years experience and whose judgment was thoroly dependable were written to (37 responded) as follows:

'Indicate by numerals below your greatest lack when you began teaching, marking your greatest lack number 1, next 2, etc., in the following respects:

'Academic knowledge in the branches you were teaching.
'Mastery of methods of teaching.
'General scholarship.
'Practical school management.'

The numbers by which the graduates indicated the rank of each of the four items were added. * * * The smaller the sum for any of the four aspects, therefore, the greater the lack. The general rankings of the sums and the number of first places (greatest lack) assigned each of the four aspects are as follows:

	Sum of ranks.	No. of firsts.
Mastery of methods of teaching.....	45½	11
Practical school management.....	49	13
General scholarship.....	72½	2
Academic knowledge of common branches..	79	1

"Apparently the normal school does best what it is easiest to do, viz.: to teach the common branches and to give general scholarship and should devise means of giving its graduates more freedom and skill in the art of teaching.

"A second request was: 'Check twice the subjects which you regard as especially valuable and check once the subjects which have considerable value in the required subjects of study as given below' (the subjects being listed). The sums of the check marks for the subjects indicate their relative importance in the minds of graduates replying, and are as follows:

[1] The Winona Normal Bulletin, Feb., 1917, pp. 291-2.

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Teaching I	53	Sociology	41
Teaching II	53	Theory of Education	40
Teaching III	52	Geography	39
English	49	Penmanship	37
Reading	43	Psychology II	37
Arithmetic	42	Drawing	34
Psychology I	42	Music	33
School Management	42	Civics	31
History U. S.	41	History of Education	28
Literature	41		

The very limited range of possible degrees of lack and of value allowed for in this study reduces somewhat the comparative value of the figures arrived at, but the returns do show rather clearly the high value which the persons consulted attached to the experiences afforded by practice teaching and the lack of the sort of training which can be best given in connection with practice teaching.

The high relative value of practice teaching shown by all the studies made does not warrant the conclusion that more practice teaching should be done than is now generally required in teacher training institutions. What the studies do indicate is that the practice teaching is so important a part of the work in the normal school that the training department should be given every facility for carrying on its work effectively, and that the normal school as a whole should be so organized and its work so conducted that the practice work, when undertaken, shall be of the maximum benefit to the student. The amount of practice teaching to be done must be determined by consideration of this importance in connection with the many other factors that govern curriculum making.

The results of these studies do very definitely confirm the opinion of persons engaged in normal school administration, as quoted in the preceding pages, that the practice school is the department of the normal school about which the curriculum for the training of teachers should be organized.

The purposes of the present study are to find: (1) what the training facilities of state normal schools are and how the training departments are organized; (2) the amount and nature of the students' contact with the training departments; (3) the relation of the teachers in other departments of the normal school to the

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work of the training department and the participation by the training school staff in the work of other departments; (4) what purposes the training departments propose to accomplish and how the training departments are organized and operated to accomplish these ends.

The materials for the study have been collected by correspondence with normal school presidents, directors of training and critic teachers, and by examination of catalogs and bulletins issued by normal schools. Only state normal schools have been considered. A random selection of one hundred schools was made by selecting from the list in the Educational Directory of the Bureau of Education for 1917-18, pages 119 ff., the first school for each state, the first and second for each state in which more than one school is maintained, and a third school from the states with the largest number of schools, to make up the one hundred. Data from a fourth school in each of two states are included because they happened to be available.

Replies to the questions asked were received from fifty-four schools. Catalogs of all of the schools concerned have been available. In each topic discussed in the study, the number of schools represented by the data used will be indicated.

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II.

TRAINING FACILITIES AND THE ORGANIZATION OF TRAINING DEPARTMENTS.

Training departments in state normal schools differ from one another in three principal ways: (1) as to whether observation, demonstration and practice teaching are done in schools wholly under the control of the normal school, or in public schools; (2) as to whether separate schools are maintained, one for demonstration teaching and observation, another or others for practice teaching; (3) as to whether supervision of practice teachers is done (a) by critic teachers who are also teachers of the rooms in which practice teaching is done, or (b) by special supervisors, the rooms being in charge of regular room teachers who are responsible for the school in its relations to the pupils but who have no responsibility for the work of student teachers.

These three situations are found in all possible combinations excepting that no case has been found among the schools studied of two separate schools maintained wholly by the normal school, one for observation and demonstration teaching, a second for student teaching. When a model school is maintained, practice teaching is done in public schools.

Of seventy-five schools for which the facts could be ascertained, forty-two have practice schools established and operated wholly under normal school authority; nine use only city or village schools for observation and practice; twenty-four have practice or model schools under the control of the normal school and also use public schools under coöperative management of normal school and local authorities. In six of these twenty-four cases, the school wholly controlled by the normal school is used as a school for observation and for demonstrational teaching with but little student teaching.

The arrangements with local school boards under which nor-

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mal schools make use of city schools for practice teaching vary. In cases where the normal school is located in a small town the normal school may assume control of all elementary education, organizing the schools to serve the purposes of the normal school. This is true, for example, at Geneseo, New York, at Plymouth and at Keene, New Hampshire, at Framingham, Massachusetts, at Dillon, Montana, and at Albion, Idaho.

In other cases the schools of the town are maintained jointly by the normal school and the local community. At Hays, Kansas,

"By an arrangement with the city of Hays, the city school system is used as a pedagogical laboratory for observation, investigation, and practice. The professior of education of the normal school is *ex officio* superintendent of the city schools, performing all the functions of that office and directing the work of teacher training. The city provides all equipment and pays the salaries of all the regular grade and high school teachers. The board employs teachers nominated by the superintendent. The services of the superintendent and all special supervisors are furnished by the state."[1]

Hays has a population of about 2200. At DeKalb, Illinois, a similar arrangement is in force, including the service of the director of training of the normal school as city superintendent, but not all of the city schools are used as training schools. At Greenville, North Carolina, the city superintendent is director of practice in the city schools and the county superintendent is director of practice in the rural schools. At Ellensburg, Washington,

"The training school is organized with special reference to the needs and conditions of the local school system, the class-room teachers being under the cooperative oversight of both normal school and city boards of trustees."[2]

At Mayville, North Dakota, the normal school pays an additional salary to selected teachers in the city schools and to the principals of the schools in which these teachers are employed, and both teachers and principals coöperate with normal-school supervisors in directing practice work. At Providence, Rhode Island,

"The training schools are established by contract with the local authorities. * * * Critic teachers are nominated by the Trustees of the Normal School and elected by the School Committees of the towns which they serve."[3]

[1] Fort Hays, Kansas Normal School, Training School Bulletin, p. 5.
[2] Ellensburg, Washington, State Normal School Catalog, 1918, p. 13.
[3] Rhode Island Normal School Bulletin, May, 1918, p. 25.

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In all but one of the normal schools having their own practice schools and using city schools also, the students' first teaching is done in the practice school and later a part or all of the students are given opportunity for additional practice teaching in the city schools. At Duluth, Minnesota,

"All members of the senior class who are assigned to the Training Department for teaching are later assigned to a supervising teacher in the city schools for cadet work."[1]

At Providence, Rhode Island, the school of observation

"furnishes under the most helpful and encouraging conditions an opportunity for the young teacher to begin her practice teaching. * * * She is well fitted for the next step in her preparation, the training school."[2]

At San Diego, California, all students are given their preliminary practice teaching in the practice school and the better student teachers are then given assignments to city schools. At Emporia, Kansas, which is the exception mentioned above, only completely inexperienced student teachers are sent to city schools, to gain some experience before undertaking practice in the normal school's practice schools. At Normal, Illinois, some students do their practice teaching in the training school directly connected with the normal school; others receive their training in the Soldiers' Orphans' Home, the school of which is under the supervision of the normal school. In the cases of three of the schools studied the only opportunity for students to teach in city schools is by serving as supply (or substitute) teachers, the opportunity being open to those students who have already had public-school experience.

The most satisfactory arrangement for training school purposes is probably (1) a school located on the normal school grounds and completely under the control of the normal school, where demonstration teaching, observation, preliminary participation and first practice teaching may be done, together with such educational experimentation as can be combined with these activities; this (2) supplemented by training facilities in public schools. Either one without the other is unsatisfactory. In schools making no use of public schools for training purposes, student teachers are inadequately prepared to meet the schoolroom conditions of the

[1] Duluth, Minneosta, State Normal School Catalog, 1918, p. 17.
[2] Rhode Island Normal School Bulletin, May, 1918, p. 24.

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public schools which are not duplicated in the practice school organized primarily for the purposes of practice teaching. Ten directors of training with whom correspondence has been carried on in the course of the present study have made unsolicited statements to the effect that training facilities in the schools with which they are connected will be unsatisfactory until arrangements can be made for supplementary practice in public schools. On the other hand, in normal schools having no conveniently located elementary school completely under the control of the normal school it is impossible to carry on the observation and preliminary participation that should be antecedent to practice, which ought to be a feature of the entire normal school course and a feature in as many as possible of the courses taken in the normal school in all departments. Without such a school close contact in the elementary school work and educational experimentation by the normal school staff are made less easy. Teacher-training institutions which have no such school connected with them, or inadequate schools, supply the deficiency as soon as funds are available for the purpose. The principal of one training school complains bitterly that the lack of an adequate training school building makes it impossible to give more of the practice work in a school wholly under the control of the normal school instead of in city schools. Another director of training says that practice teaching done in schools not wholly under the control of the normal school is proving unsatisfactory in the case of beginning teachers. At the University of Wisconsin, the Madison high school was used for a training school only until the University's own school could be built. The new high school building at the University of Illinois has just been completed, arrangement for use of the local high schools for training purposes having been found insufficient and otherwise unsatisfactory.

Only nine of seventy-five normal schools have been found to be unsupplied with a practice school wholly under the control of the normal school, and in six of these the whole of the city school system is completely under the management either of the normal-school board of trustees or of the state board of education. Forty-

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two of the schools make no use of public schools for training purposes. Apparently the most imperative need for change in organization in training departments, therefore, is a change which will make more general the use of public schools for supplementary practice teaching.

That so many normal schools do not use public schools for training purposes is doubtless due, first, to the failure of persons responsible for the administration of the schools to realize the necessity for such public school experience as a part of the preparation of teachers for the public schools. It is due, secondly and probably more frequently, to the unwillingness of local communities to open their schools to normal-school students for practice purposes. In cases where the local school boards are willing to have schools used for training purposes, normal-school boards and principals hesitate to avail themselves of the opportunity, fearing that the attitude of the community at large, of a new board, or of a new superintendent may make the arrangement inoperative after it has been undertaken, and that, in consequence, the work of the training department will sooner or later be disturbed.

In attempting to secure the use of public schools of its community for training purposes, a normal school which already has a practice school of its own may safely advance the following arguments:

1. That so far as the training of the student teachers is concerned, they will have had, before doing any teaching in the public schools, more preparation and experience than have eight out of ten of the persons who now enter the teaching profession each year.

2. That a large part of the teaching will be done by critic teachers, supervisors, normal-school subject-matter specialists and carefully selected room teachers. Because the normal school will supplement local funds available for teachers' salaries, the last named group will comprise more expert teachers than the community could hope otherwise to afford.

3. That all of the work of the schools, particularly that of the student teachers, will be supervised with a care which the community alone could not provide for.

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4. That the educational welfare of the community will be under the direct care of the normal school faculty, made up of persons who are specialists in the field of education.

Useful material for convincing the people of a community of the advantage to them of such a coöperative arrangement can be obtained from the statement by Dr. C. A. McMurry in the May, 1915, *Northern Illinois State Normal School Quarterly*,[1] and from the results of tests given in the training school at Madison, South Dakota, published in the *Training School Bulletin* of that school for July, 1918.

It is unwise to make any promises that the arrangement will result in any saving to the community in school taxes. It should be understood that state funds are to be used to raise the quality of the schools, not to decrease their cost to the town, and the community should enter into the agreement with that understanding. If it is to be permanent, the arrangement should be favored by the community as a whole and not simply consented to by the board of education; otherwise a change in the personnel of the board might easily jeopardize the arrangement.

The data obtained give no basis for choice between supervision of practice teaching by critic teachers who have direct responsibility for the instruction of pupils when student teachers are not in charge on the one hand, and supervision by special supervisors with room teachers in charge of each group of children on the other hand. Both systems are found in schools of all sizes, but it is interesting to note that the larger schools use predominantly the latter method while the smaller schools use the former.

Other things being equal, the supervision of young teachers is probably more effective when done by one who is, himself or herself, a teacher of children. Bureaucratic supervision is probably less effective and certainly less desirable than coöperative supervision. City school systems with highly centralized and specialized systems of supervision are centers of unrest among teachers who find the supervising oppressive rather than helpful. The New Jersey name, "Helping Teachers," for supervisors of

[1] Published by the Northern Illinois State Normal School, DeKalb, Illinois.

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rural teaching is a happy term and the situation is a fortunate one if the name is truly descriptive. When the children of a given grade are taught for a part of the time by student teachers and a part of the time by the critic teacher who supervises those students, the teaching can be given greater continuity than when the room teacher takes no part in the direction of student teachers. Divided authority in the conduct of a schoolroom may easily become a source of friction, and as such is to be avoided so far as possible. The administrative plan suggested by the Carnegie Foundation[1] provides for no supervision by persons who are not also teachers of children.

The considerations which lead to the use of supervisors and room teachers are:

1. The teaching load of a critic teacher who has full responsibility both for a group of pupils and for as many student teachers as must ordinarily be accommodated in one room is very heavy; entirely too heavy if more than five or six student teachers must be supervised at one time. Long hours are made necessary to give time for conferences with student teachers.

2. If the number of student teachers assigned to one room be made sufficiently small, the number of rooms used for practice teaching must be correspondingly large, and the expense of employing so many room teachers who are also competent critic teachers becomes very great, ever assuming that a sufficient number of such competent teachers are available which is not often true.

Only the enlargement of practice facilities can meet these difficulties, with such increased appropriations as will make possible a large critic staff and make possible the offering of salaries which will attract competent persons to the business of critic teaching.

Standards for the number of pupils to be enrolled in the training schools in proportion to the number of student teachers have been worked out by Bagley and by Judd and Parker. Bagley

[1] Curricula Designed for the Professional Preparation of Teachers for American Public Schools—Carnegie Foundation for the Advancement of Teaching, 1917.

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proposes the formula: $n = 1.30 \frac{15\ s\ c\ m}{t} \cdot \frac{4}{3}$,

in which n is the proper enrollment in the practice school; s, the number of student teachers to be accommodated during the school year; c, the number of recitation units during which the student teacher is in charge each week; t, the number of recitation units in the training school classes per week; m, the fraction of the total school year during which teaching is required. This formula is based upon the principle that *in no case* should more than three-fourths of the work of training-school pupils be in direct charge of student teachers. Bagley strongly recommends that this proportion be reduced to one-half.

The standard suggested by Judd and Parker[1] is that in a training school where two-thirds of the teaching is done by student teachers, each group of twenty children will accommodate two-thirds times four to nine practice teachers; that in a public school where one-half of the teaching is done by student teachers, each group of forty children will accommodate one-half times four to nine practice teachers annually.

On the basis of data gathered from sixty-eight normal schools Kelly and Scott[2] make the following summary:

"The institution giving about the median amount of emphasis to training school work is one which,

"1. Has about 1.6 times as many students in grades 13 and 14 as in grades 1 to 8;

"2. Has about 2.2 times as many children in the training school as students teaching during the year;

"3. Has about five and a half times as many members in the entire faculty as in the training school faculty; and

"4. Requires about one hundred sixty hours of student teaching for graduation."

It is very difficult to get all of the items of information necessary for the application of Dr. Bagley's formula, but from the figures given in the report of the Commissioner of Education and from data given in catalogs it has been possible, by assuming that the number of recitation units in the training school each week

[1] C. H. Judd and S. C. Parker "Normal School Standards," Bul. No. 12, U. S. Bur., Ed. 1916.

[2] Educational Administration and Supervision, 1915, Vol. 1, p. 591.

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is forty (Bagley suggests that it will ordinarily be thirty) to estimate the adequacy of the training school enrollment in fourteen of the forty-two schools studied, having all practice teaching done in their own training schools. In only three of these fourteen schools is the number of pupils enrolled in the training school as reported to the Commissioner of Education in 1917 as large as the figure resulting from the application of the formula. In three cases the number actually enrolled was less than one-half of the theoretically proper number. This fact, together with the fact that fourteen is the median number of children in a group taught by student teachers as reported by twenty-two schools not making use of public schools for practice teaching, indicates that there is a deficiency on the side of quantity as will as of quality in the training facilities of schools not making use of public schools for training purposes.

Such a lack of sufficient practice facilities was reported by Judd and Parker in 1916. They report[1]:

"As a matter of fact, many of the normal schools do not actually enjoy such facilities as would be indicated by these theoretical calculations, owing to the fact that they have training schools with relatively few children, or they have not succeeded in making arrangements whereby they can utilize half of the time in the public schools for practice-teaching purposes."

An item of major importance in the organization of the training department is the provision for associating with that organization members of other normal school departments, especially of the department of education. The usefulness of the training department depends in large measure upon the use made of its facilities by the whole normal school staff, but the extent of this use depends rather upon the disposition or attitude of the teachers concerned than upon details of organization. In one school the organization of which shows close organized relationship between the department of education and the training department, —the same man being head of both,—a personal visit showed that the relationship was far from close; indeed, the nominal head of the training school, by his own statement, had not been in the

[1] Bureau of Education Bulletin, 1916, No. 12, p. 55.

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training school building for some weeks until he accompanied the visitor there. It is only fair to add that a change has been made which transfers this teacher to other work and places a new man at the head of the training department. The supervisor of training in another school says:

"Of all departments, that of education is hardest to coöperate with, chiefly because their criticism has been destructive, generally, rather than constructive."

The nature and extent of actual and possible integration of training school work and work of other normal school departments is discussed in detail in Section IV. Section III will describe the use which is made of existing training facilities as indicated by the amount and nature of students' contact with the training department.

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III.

THE NATURE AND AMOUNT OF STUDENTS' CONTACT WITH THE TRAINING DEPARTMENT.

If the work of the normal school is to be completely professionalized, the students in the normal school should be in very definite contact throughout their entire course, with schools similar to those in which they the preparing to teach. Every principle of vocational education to which we have already referred implies that the curriculum should provide for such contact from the very beginning.

This assumption is supported by the emphasis which persons engaged in normal school work have placed upon the importance of the training department as indicated in the preceding sections. It is the assumption upon which the "Curricula Designed for the Professional Preparation of Teachers for American Public Schools" provisionally suggested by the Carnegie Foundation, are constructed. Section 10 of the theses which preface these curricula says:

"Observation of class work and participation in the activities of the training school should be required from the earliest practicable moment."

The proposed curricula put this earliest practicable moment at the beginning of the first term, in connection with the course "Introduction to teaching" which is common to all the curricula. The description of this course includes the statement:

"* * * Instruction should be correlated with numerous visits to the respective departments of the practice school."

It is the purpose of the present section to discover by analysis of curricula and of courses, supplemented by statements from persons connected with the schools concerned, what the *varieties* of contact are which the normal school student now has with the training department. So far as is possible, the *amount* of such

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contact is indicated as well, but as Judd and Parker pointed out in 1916, it is impossible to make, from published data, any accurate estimates, either of the total amount of work required for graduation in many schools, or of the amount of credit assigned to any given subject of the curriculum. To make a quantitative comparison of schools in the present study would be additionally difficult since the contact with the training school which is incidental to the normal school courses in methods, psychology, and similar subjects, can be indicated simply in the two degrees, "present" or "absent", and varies widely in amount in different cases. There may also be contacts with the training school in connection with courses the catalog description of which gives no indication of such contact, since these descriptions vary widely in their completeness for different courses within the same school and even more widely as between schools.

Wherever possible in the analyses the total amount of credit required for graduation is indicated and the amount of credit assigned to courses which clearly involve constant contact with the training department. The amount of credit given to courses which involve some undeterminable amount of contact with the training school is also indicated but has low value as an index to the amount of contact involved. It will be unwise to attempt, from the figures given, to make comparisons of one school with others as to the amount of contact. The comparison which can be made is as to the varieties of contact afforded.

The data from catalogs come from those published during the spring and summer of 1918. The data from letters were gathered during February and March, 1919.

Analysis of the kinds of contact which students in normal schools have with the training department; with such indices of the amount of contact as the data make possible.

CALIFORNIA.

Fresno.

Practice teaching: 12 weeks, one period a day in training school connected with normal school; 12 weeks, half day; in city schools for better prepared, in training school for others.

Observation: Approximately 20 lessons in connection with work in principles of teaching; one-half given by supervising teachers; one-half, observation of student teachers.

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Other Contact: Students supervise playground activities of training school children before undertaking practice.

San Diego.

Practice teaching: Total of 300 hours; in single periods in training school connected with normal school, 180 hours; whole or half day teaching in city schools, 120 hours.

Observation: Special course of 60 hours.

GEORGIA.

Athens.—Four year course only.

Practice teaching: 4 45-minute periods a week for four months, in school connected with normal school. In fourth year.

Observation: In connection with general methods course (2 points required); in connection with course in teaching of literature (2 points required); in connection with course in methods and management (3 points required).

IDAHO.

Albion.

Practice teaching: 36 weeks, one hour a day, in city schools.

Observation: One term, one hour a day; demonstration lessons given by critic teachers for normal school teachers who wish to have lessons seen in connection with courses given; some observation carried on in connection with a course in elementary education, preceding practice teaching.

Lewiston.

Practice teaching: 36 weeks, 1 period a day in school connected with normal school; some practice teaching in city schools in manual training, home economics and physical education.

Observation: In connection with courses in psychology, teachers courses in English, arithmetic, geography, science and history, primary methods, junior high school methods.

ILLINOIS.

Carbondale.

Practice teaching: Three terms, one hour a day in school connected with normal school.

Observation: In connection with practice teaching.

Charleston.

Total credits for graduation 10.

Practice teaching: 1 credit (10%). 1 hour a day one year in school connected with normal school.

Observation: In connection with psychology (1 credit required); in connection with course in reading (2/5 credit, required); "The training teachers * * * teach special lessons for observation by classes in methods in special subjects in the normal school proper." Catalog, p. 54.

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Macomb.

Total credits for graduation 26.

Practice teaching: 3 credits (11.5%). 1 period a day for 3 terms. One term in Junior year; two terms in Senior year; both in practice school connected with normal school.

Observation: In connection with principles of teaching (1 hour, required). In connection with 1 hour required courses in arithmetic, English, geography, history, drawing, all in Junior year; in connection with 1 hour elective courses in household arts and manual training. In connection with course in class-room management (1 credit required Senior year) there are "One or more visits to well managed schools in nearby cities." Catalog, p. 86.

Normal.

Total credits for graduation (2 year course) 26.

Practice teaching: 3 credits (11.5%). 180 40-minute periods. In school connected with normal school. Senior year.

Observation: Each practice teacher sees one demonstration lesson a week and spends a second hour discussing it.

"The teachers of 'Teaching Process', General Method and Reading Method frequently take classes to the training school to observe work with the children. The same is done occasionally by other teachers." (These courses are 1 credit each, required in Junior year.) Other contact—"Certain students * * * supervise the children at noon recesses and during study periods." Catalog, p. 85.

INDIANA.

Terre Haute, and Eastern Division at Muncie.

Total credits required for completion of degree course 48; for completion of two year course, 25.

Practice teaching: 2 credits in either course (4.2% and 8% respectively). In school connected with normal school. 1 hour a day.

Observation: Course of one credit offered for college curriculum students who wish to apply for teaching license.

KANSAS.

Emporia.

Total credits required for B. S. in Education 128; required for life certificate 66.

Practice teaching: 4 credits in degree course (3.1%); 6 credits in life certificate course (9%).

In an elementary school connected with normal school and, for teachers without previous experience, in city schools.

Observation: Carried on in connection with conferences, 2 hours a week, which have taken the place of special methods courses. Simultaneous with practice. In connection with general methods courses (3 to 8 hours required).

Other contact: "The director of teacher training and the professor of rural education act as chief advisers to candidates for the life certificate in electing their subject-matter courses." (Director of Training, H. G. Lull, in Educational Administration and Supervision, Nov. 1918, p. 489.)

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Fort Hays.

Total credit required for degree 124 hour credits; for life certificate, 62 hour credits.

Practice teaching: 8 and 4 hours respectively. (6.4%.) In city schools.

Observation: In connection with methods courses and in connection with practice teaching. Some observation required in connection with course in Methods and Management; emphasis upon class demonstrations in course in primary methods. (Former 2 hours, latter, 4 hours credit.)

KENTUCKY.

Bowling Green.

Practice teaching: 20 weeks, 5 periods a week. In an "Elementary school largely supported by the Normal School."

Observation: 4 weeks, 5 times a week. Methods classes in language and method classes in reading also observe in the training school.

LOUISIANA.

Natchitoches.

Practice teaching: 1 period a day for one school year in practice school connected with the normal school.

Observation: In connection with certain of the methods courses.

MAINE.

Farmington.

Total required for graduation 180 hours.

Practice teaching: 24 hours credit (13.3%). Full time teaching for one quarter of second year while student carries courses in observation, methods and history of education. Most of practice teaching done in school connected with the normal school. Some students practice in town schools.

Observation: A regular course as indicated above; some observation in connection with psychology.

MARYLAND.

Towson.

Practice teaching: 3 hours a day for 12 weeks, in a practice school connected with normal school.

Observation: Is carried on in connection with practice teaching. General methods courses are 20% demonstration lessons. In special methods courses there is almost as much (20%) of demonstration lesson observation.

MASSACHUSETTS.

Bridgewater.—Three year curriculum.

Practice teaching: Half day for 13 weeks in the training school; full day for 13 weeks in town schools. (16.6%.) Third year.

Observation: 13 weeks, 2 periods a week in the second year.

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Framingham.

Practice teaching: Full time for 12 weeks; 8 weeks in practice school; 4 weeks in town schools. Senior (second) year.
Observation: In connection with practice teaching.

MICHIGAN.

Ypsilanti.

Practice teaching: 2 hours a day for 3 months, in school connected with the normal school.
Observation: "Classes in the various methods courses are brought into the training school under the direction of the teacher of methods. Members of the Normal School Faculty bring their classes to the training school for observation and occasionally teach a class of children themselves."

MISSOURI.

Cape Girardeau.

Total credits for graduation 60 hours (2 year course).
Practice teaching: 6 credit hours (10%). 1 hour a day, in practice school connected with the normal school.
Observation: "We give no separate course in observation because we have not the teaching force. Some observation is done in courses in school management, principles of teaching, special methods and school supervision. Students do not participate in the work of the training school until they take up their teaching."

Warrensburg.

Practice teaching: Three terms, one hour a day. (2 year curriculum). In practice school connected with normal school.
Observation: A course in observation given by the principal of the training school precedes practice teaching. Some observation is carried on in connection with normal school classes, both in the training school and in public schools.

MONTANA.

Dillon.

Practice teaching: 6 hours a week for 30 weeks. In the school system of Dillon.
Observation: "Follows lectures on the theory and art of teaching. Six weeks of work * * * are given to students in groups of from five to eight and such observation is made under the direction of the supervisor of the division (primary, intermediate or grammar grade). Courses in methods follow.

Members of the collegiate staff give demonstration lessons as well. This latter is true particularly of the departments of English, history, science and mathematics."
Participation: "During the six weeks devoted to observation, the prospective cadet teacher assists the critic with board work, seat work, movement of pupils about the room, halls and playground and thus becomes familiar with the routine of management."

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MINNESOTA.

Duluth.

Total credit for graduation 1,410 hours.
Practice teaching: 180 hours (12.8%). One term in practice school connected with normal school; a second term in city schools.
Observation: In the term preceding practice teaching, three observation lessons a week connected with two class hours devoted to school economy and psychology of the common branches. In connection with normal school course in reading the class observe work in reading both in practice school and in city schools (60 hour required course). In connection with class in music, demonstration and observation in training school. (60 hour required course.)

Winona.

Practice teaching: 240 hours. 180 hours in training school connected with normal school; 60 hours in city schools.
Observation: "Carried on slightly in connection with methods courses and Theory of Education."

NEBRASKA.

Chadron.

Practice teaching: Two class periods a day for one year, in a practice school connected with the normal school.
Observation: In connection with methods courses taught by training school staff covering branches taught in first ten grades.

Peru.

Total credits for graduation 64.
Practice teaching: 4 credits (6.25%). One period a day one semester. Practice school connected with normal school.
Observation: Combined with methods courses—4 credits required. "Principles of Education" illustrated by model lessons in different subjects and grades.

NEW HAMPSHIRE.

Plymouth.

Total credits for graduation, 100.
Practice teaching: 18 credits (18%). Full time last half of second year. Village school organized as practice school.
Observation: 4 credits required—2 in Junior year; 2 in Senior year. Observation is carried on in connection with the following required courses in the Junior year. 2 credits each: English literature and grammar; reading; history; physiology and hygiene; arithmetic.
Other contact: "Normal school students are constantly on the playground and in the gymnasium with children of the practice school." Catalog, p. 39.

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NEW MEXICO.

Las Vegas.

Total credits required for graduation 96 (2 year curriculum).
Practice teaching: 10 credits, second year (10.4%). One hour a day for 24 weeks. Training school connected with normal school. Some substitute work is done in city school by students.
Observation: In connection with courses in special methods for 12 weeks preceding practice.

NEW YORK.

Fredonia.

Credits required for graduation 2,420 hours.
Practice teaching: 600 hours (24.8%). Practice school connected with normal school.
Observation: In connection with practice teaching. "Connected with all professional work."

Geneseo.

Credits for graduation, 2,220 hours.
Practice teaching: 600 hours (27%). Second year. In practice school connected with normal school.
Observation: "The course in observation follows rather closely that in psychology with which it is intended to be correlated." Catalog, p. 21.
"English II is related directly to the elementary school and its problems through observation lessons in the practice school." Catalog, p. 21.
"English III and IV; Observation classes in the practice school are conducted in connection with both composition courses." Catalog, p. 22.
"Reading, phonics and spelling: Throughout the course opportunity is offered for the observation and discussion of type lessons." Catalog, p. 23.
Each of these courses, 100 hours required.
"History classes for observation are taught in the practice school by the critic of the grade. The methods class observe such work under the direction of the methods teacher." Catalog, p. 27. 80 hours required.

Oneonta.

Practice teaching: 550 hours, Senior year; practice school connected with normal school.
Observation: 50 hours immediately preceding practice.
Normal school teachers teach occasional observation lessons in connection with their courses.

NORTH CAROLINA.

Greenville.

Credit for graduation, 153 hours.
Practice teaching: 16 credit hours (10.4%). 16/25 full time for one term. Practice school connected with normal school.

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Observation: Carried on in connection with practice teaching. Some observation in connection with methods courses.

OHIO.

Bowling Green.

Practice teaching: 3 50-minute periods a week for 36 weeks, in practice school, connected with normal school and in city schools.

Observation: In connection with psychology. One lesson a week is observed for 18 weeks. A second period is devoted to discussion of lesson seen.

Two 50-minute periods a week of observation in connection with course in principles of education; nine or ten demonstration lessons in one term in connection with course in the teaching of arithmetic, in addition to regular hours of the course; three to six lessons each in courses in geography, history and English.

Kent.

Units required for graduation, 25.

Practice teaching: Combined with observation and discussion, 3 units, (12%). One 45-minute period a day for 36 weeks. In practice school controlled by normal school, serving as one city ward school.

Observation: In connection with methods courses in English, history, arithmetic and reading. In connection with course in principles of teaching.

OKLAHOMA.

Ada.

Practice teaching: One period a day for 24 weeks, in school connected with normal school.

Observation: One period a day for 12 weeks paralleling practice, in training school and public schools. Some observation in connection with English, arithmetic, history, elementary science.

Other Contact: Some assistance is given by students in Junior year in music, drawing and penmanship in training school.

PENNSYLVANIA.

Bloomsburg.

Practice teaching: 200 40-minute periods in practice school connected with normal school.

Observation: Each critic teacher gives six demonstration lessons preliminary to practice teaching. Some observation in connection with psychology.

RHODE ISLAND.

Practice teaching: 5 credit hours in practice school—single hour teaching; full time one semester in city training schools; half year as regular teacher under normal school supervision.

Observation: In connection with all methods courses.

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SOUTH DAKOTA.

Madison.

Total credits required for graduation, 122.

Practice teaching: 25 credits (20.5%); one hour a day for 12 weeks in Junior year; 2 hours a day for 12 weeks in Senior year; in practice school connected with normal school and to a limited extent in city schools.

Observation: A course in observation and school economy recites daily for 12 weeks. Demonstration lessons are given in connection with an elective course in story telling.

Spearfish.

Practice teaching: Three semesters, one hour a day. Practice school connected with normal school.

Observation: Carried on in connection with courses in psychology, general method, methods in arithmetic and methods in English.

Other contact: Students supervise playground activities of practice school pupils.

TENNESSEE.

Johnson City.

Practice teaching: Combined with observation, 100 hours. Practice school connected with normal school.

Observation: "Courses in observation are given under the direction of the observation school director and critic teachers and are connected with the normal school courses in methods. Normal school teachers give occasional demonstration lessons."

TEXAS.

Canyon.

Practice teaching: 3 hours a day for 3 months in practice school connected with normal school.

Observation: Given in connection with courses in education. Demonstration lessons given by department of education teachers and by training school supervisors.

Other contact: Students assist in recess supervision and in keeping student records.

VIRGINIA.

East Radford.

Practice teaching: 12 weeks, 15 hours a week. Practice school connected with normal school.

Observation: 2 lessons a week given by critic teachers in Junior year. One lesson a day in senior year under direction of director of training. Of these lessons, 30 each term are taught by critic teachers; 10 by teachers of special subjects; 10 by student teachers.

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WASHINGTON.

Bellingham.

Practice teaching: 10 credit hours. Begins in practice school connected with normal school. For one term half day or full day teaching in city schools.

Observation: In connection with courses given by department of education. Demonstration lessons taught by teachers in the normal school departments.

Ellensburg.

Credits required for graduation, 96 credit hours.

Practice teaching: 9 credit hours (9.4%). Practice school connected with normal school. 6 hours in Junior year; 3 hours Senior year.

Observation: All methods courses are also observation courses. 12 hours required.

Other contact: Students in psychology give standard tests in schools in nearby towns. 3 hours required.

WISCONSIN.

Platteville.

Practice teaching: One hour a day for one year in senior year; for the greater number of students entirely in practice school connected with normal school; for a few, a part of the time in city schools.

Observation: Connected with courses in psychology and in education; in connection with courses in music, arithmetic and geography.

Stevens Point.

Practice teaching: 18 to 36 weeks, one period a day. Senior year. Training school connected with normal school.

Observation: "We have one room in our training school set aside for the purpose of conducting demonstration lessons and attempt to have some class in process there at all hours of the day. Some students take advantage of the opportunity to observe work in the demonstration room and observe every day for weeks before attempting to teach, but such students are the exception."

Each of these forty-six schools has one type of student contact with the training department definitely provided for, namely, practice teaching. In the nineteen schools for which the proportion can be definitely ascertained, the practice teaching varies in amount in the two-year curricula from 6.25% to 27% of the total credits required for graduation, the median for the nineteen being 11.5%.

Forty-two of the forty-six schools have definite provision for the observation of teaching and the discussion of the lessons seen. One of the remaining four provides demonstration lessons at all

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hours of every day which students may attend voluntarily. The three others carry on observation only as an incident to practice teaching.

Beyond this, the amount and nature of the contact of students with the practice schools depends upon the interest of particular teachers in using the facilities of the training schools in connection with their courses. If the number of teachers having such interest happens to be large in a school, the variety of courses which involve contact with the training department is correspondingly large; if such teachers are few, the contact of the students with the training department is less.

The normal school courses which involve, some in one school, some in another, among the forty-six schools studied, direct contact with the kind of school in which students in the course are preparing to teach are:

Psychology	Algebra
Theory of teaching	Drawing
Principles of education	Manual Arts
Educational measurements	Physical education
Arithmetic	General method
History	Special methods
Geography	School management
Grammar and composition	Latin
Literature	Story telling
Reading	Household arts
Science	Music

The contacts found may be summarized under four heads:

1. Practice teaching with the accompanying conferences; varying in amount from 6.25% to 27% of the student's work in the two years spent in the normal school.
2. Observation varying in amount from such observation of teaching as is incidental to practice teaching to full year courses, with widely differing amounts of observation in connection with the courses listed above.
3. Participation in the work of the training school before practice teaching is undertaken by assisting teachers in schoolroom routine, by supervising playground activities and study rooms.
4. Testing results by use of standard tests in connection with courses in psychology and in education.

The striking fact brought out by the data considered is the wide variation in the sorts of contact afforded and in the amount of practice teaching, which is the only sort of contact common to

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all of the schools. As Sanders[1] says in conclusion to his study of eighty-one normal schools: "There is among normal schools no recognized best way to develop a student teacher." He reports a variation in the amount of practice teaching required from 30 to 400 teaching hours. Judd and Parker[2] report a variation, among the thirteen schools studied, from 4% to 27% of the total curriculum requirements.

A change toward greater uniformity in respect to the practice-teaching requirement may well be brought about by an approach to the median amount from both extremes. The curricula of the schools offering the very small amounts are certainly too little professionalized; purely academic courses occupy too prominent a place; the professional aspects are too little emphasized. In the schools where the largest amounts of practice are required the curricula are too narrowly professional; "review courses" and "methods courses" are prominent and other types of professional courses on a collegiate level are lacking. For a part of this long practice period might well be substituted professional courses on a higher level and preparatory participation in the work of the training school which would make a shorter period of practice, when undertaken, more effective than is the longer period now required.

Practice can be and is being made more effective by such participation; but it is clear that no form of participation can take the place of responsible practice teaching. The attempt to make it do so in the teachers' training department of the University of Wisconsin under the name of "Directed Teaching" as reported in the *Eighteenth Year Book of the National Society for the Study of Education* does not sound convincing, but it does suggest a type of profitable participation which may be substituted for a part of the long practice teaching period in certain of the schools studied. The following quotations indicate the essential features of this so-called "Directed Teaching":

"Each college senior in this course * * * participates in the high-school class in the Wisconsin High School approximately forty days for one hour a day. Each of these seniors writes each

[1] W. H. Sanders, Pedagogical Semenary, March, 1918, p. 55.
[2] Bureau of Education Bulletin, 1916, No. 12, p. 85.

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day three to four pages (300-500 words) on the 5x8 cards already described, which are provided for these daily reports."[1]

"It should be remembered that throughout the class hour the staff teacher is always directly in charge * * *. The significant point is that the college senior is a member of a class group, admitted on a clearly recognized basis of participation."[2]

"The first practical responsibility of the college senior is to become the best pupil in the class, not always an easy task for the majority of college seniors. After demonstrated fitness to lead the class, many and varied opportunities are given to assist the staff teacher. As noted above, this is not a privilege reserved exclusively for college seniors in the Wisconsin High School; pupils enjoy the same privilege as a part of their educational development under the doctrine of self expression and development of personal initiative."[3]

A period of training-school experience which makes the teacher-in-training "a member of the class group" in the sort of school in which he is preparing to teach; which makes him "the best pupil in the class" and gives him in common with the better pupils in the class "many and varied opportunities to assist the staff teacher" who is "always directly in charge" with the result that there are written "300-500 words of daily comment" by the student upon what he has seen and done in the training school, represents a valuable type of participation. It needs to be supplemented, however, by some opportunity for the student to meet a situation where it is not true that there is a staff member in direct charge, and where his responsibility for directing the work of the class is unequivocal.

This example of teacher preparation cannot safely be followed by normal schools. The important problem is to *increase* opportunity for completely responsible teaching as a *final* type of professional preparation. The new curriculum of the Rhode Island Normal School, which went into effect after June, 1919, represents the more desirable direction of change in normal school curricula. No student is to be graduated from that school who has not first, after completing all other normal-school requirements including

[1] Eighteenth Year-book of the National Society for the study of Education, p. 104.
[2] Ibid, p. 15.
[3] Ibid, p. 20.

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the period of apprentice teaching, completed also a half-year of fully responsible teaching as a regularly employed teacher in a school system, under the supervision of the normal school.

The conclusion is justified from the analysis of the work done in these forty-six schools, that there is no sort of work carried on in normal schools which cannot be and is not being made to have its direct relation to the work of the training department and to bring students into contact with the children of the training schools. There are certain limitations which prevent such correlation. Five have been mentioned by training-school directors and normal-school presidents in connection with this study. They are:

1. Lack of disposition on the part of normal-school teachers to coöperate with the training department.
2. Lack of the sort of ability and training on the part of normal-school teachers which would make such coöperation effective.
3. Overloaded programs for normal-school teachers due to inadequate financial resources.
4. Overloaded programs for training-school teachers due to the same cause and to lack of appreciation on the part of normal-school administrators of how heavy the critic teachers' and supervisors' load is.
5. Overcrowded curricula. There is not time for the normal-school student to do all that he should do in the time in which he tries to get his professional preparation.

The first four of these will be considered in section four. In connection with the fifth, the curricula of four schools have been examined which offer both two-year and four-year curricula, for the purpose of discovering what additional contact with the training department the addition of two years to the period for preparation involves.

1. Macomb, Illinois. Curriculum leading to degree B. S. in Education. For preparation of High School teachers.
   Program A.
   First two years identical with two year curriculum. In the two additional years one term additional of practice teaching is required in the student's major subject. If Education 32, Psychology of School Subjects, is chosen as one of the additional subjects in education, some observation

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is done. The minor electives may be, but need not be, so chosen that a term of practice teaching in those subjects may be taken.

Program B.

The major and minor subjects are chosen and begun in the first two years and the practice teaching deferred until the third or fourth year. It is then the same in amount as in the two year curriculum.

2. Cape Girardeau, Missouri. "College curriculum leading to a college degree that contains courses in education as part of the requirement for graduation."

   One course offering contact with the training department in addition to that required in the two year curriculum is offered in the four-year curriculum, a course in the teaching of Latin, in connection with which demonstration lessons are observed.

3. Indiana State Normal School. Curriculum leading to the degree B. A. in Education.

   No discoverable additional contact with the training department involved in the longer curriculum.

4. Normal, Illinois. Degree curricula for the preparation of High School teachers.

   No discoverable additional contact. Practice teaching, in the same amount as in the two-year curricula, is deferred until the fourth year ordinarily but may be taken for two of the three required terms, in the second year.

If normal schools are to offer four years of work, as it is to be hoped that they may in large numbers in the not distant future, the justification for such extended curricula must be that they offer a kind of professional training not now offered by other institutions or offered by too few of them to meet the demand for the preparation of teachers on a high level. This distinctive feature must be the intimate contact which the work is made to sustain throughout its four years with whatever grade or type of work the student is preparing to teach. The addition of two years of really professional work in the preparation of teachers of all grades will strengthen the normal schools. The addition of two years which are less professional than the two years already given in most of the normal schools cannot but weaken the whole professional work of the school. It will do this by diversion of funds

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and diversion of faculty and student interest from purely professional work. The addition of longer curricula for the preparation of high-school teachers only will tend to continue the stratification of the teaching population which must be done away with before the profession as a whole can be put upon a sound basis either economically or professionally.

In the minds of both normal-school men and of persons outside of normal schools, the question of whether four-year curricula shall be offered by normal schools is now so confused with the question of whether or not normal schools shall prepare high school teachers that it has never received fair consideration on its own merits. The question of length of curricula must be settled on the basis of whether four profitable years of preparation for teaching can be offered. The question of what grade of teachers shall be prepared is an independent question and it is to the detriment of the normal schools that the two issues have been confused.

A factor which must be considered in estimating the amount of student contact with the training department is the amount of time that the student teacher spends in preparing for his teaching each day. If the time spent in preparation for an hour of teaching is longer than the time spent in preparation for an hour of recitation in normal-school subjects, an hour of training-school work in the student's program represents more than does an hour of other normal school work.

An inquiry into this subject has been made at Winona, Minnesota, and the following report made[1]:

"Forty five hours per week of study and class discussion is expected from each student. That is, each teacher is desired to require on the average not more and not less than an hour and twenty minutes of preparation for each class exercise scheduled for five recitations per week. A student carries four subjects at once and so meets for 20 periods a week. With this student load the class periods are properly limited to 45 minutes in the clear.

"An inquiry into just what demands are being made by the instructors of each class is made from time to time. The average minutes of study for each subject as reported by students are listed

[1] Winona Normal Bulletin, February, 1917, pp. 281-2.

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for all subjects and distributed among the teachers for their information. Such inquiry shows that among the subjects and teachers the variation is as follows:

TABLE 8—THE AVERAGE NUMBER OF DAILY HOURS AND MINUTES OF STUDY GIVEN BY CLASSES IN NORMAL SCHOOL SUBJECTS AT WINONA DURING TWO TERMS; FALL 1914 AND SPRING 1916.

Subject.	Fall 1914.	Spring 1916.
Advanced woodwork		1:31
Arithmetic	1:10	1:36
Chemistry		1:38
Child Study		1:07
Civics	1:34	1:30
Cookery	1:31	2:22
Drawing		1:11
Economics	1:00	1:29
Elementary Hand work	1:30	1:35
Elementary Science	1:15	1:11
English	1:02	1:20
Geography	1:14	1:19
History of Education	1:38	1:25
Manual Training	1:21	1:48
Music	:36	1:03
Pedagogy	1:06	1:28
Physics		1:45
Physiology	1:48	1:13
Primary Methods		1:01
Psychology	1:10	1:14
Public Speaking	1:30	1:18
Reading	1:03	1:26
Rural Sociology		1:45
School Management	1:01	1:20
History of U. S.	1:43	2:02
Household Administration	1:22	1:30
Kindergarten Principles	:58	:51
Literature		1:08
Sewing and Textiles	1:18	:50
Sociology	1:50	1:12
Teaching	2:20	2:33
Technics	1:20	1:33
Zoology	1:22	1:27
Average for all	1:21	1:26

From this study it appears that practice teaching represents, for every hour scheduled, a total amount of time spent of three hours and twenty minutes or three hours and thirty-three minutes compared with an average of two hours and twenty-one minutes or two hours and twenty-six minutes represented by a scheduled

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hour of all normal school subjects averaged together. The deviation of the time spent in preparing for one hour of practice teaching from the average time spent in preparing for an hour of recitation in all normal school subjects was, for the fall term, 1914, 59 minutes, or 72.8% of the value of the middle measure (average), and for the spring term, 1916, 67 minutes, or 84.2% of the value of the average.

Sixty-three seniors in the Eastern Illinois State Normal School who were doing an hour of practice teaching and carrying three other subjects each day were asked to report how many minutes were spent on the average in preparation for one hour of recitation in each subject and how many minutes in preparaion for one period of practice teaching. The median time reported as spent in preparation for each of the following subjects is as indicated. Certain subjects,—required Junior work being made up,—are omitted. Related subjects in which but a few students are enrolled are grouped together.

Subject.	Median number of minutes spent in preparation for one recitation.
Practice teaching	100 to 109
History of education	50 to 59
Philosophy of education	50 to 59
Literature	40 to 49
Mathematics:	
Trigonometry, Analytics, College Algebra	80 to 89
Physiology	40 to 49
Economics	50 to 59
Science:	
Physics, Zoology, Botany	30 to 39
French	40 to 49
Domestic Art	30 to 39
Manual Arts	30 to 39
Public school music	20 to 29

Median for the 11 subjects or groups other than teaching, 40-49.

The evidence from these two studies shows that a scheduled hour of practice teaching means more work in teaching than a scheduled hour of normal school work does in the subject concerned by a margin of 75% at Winona, of 100% at Charleston. If the

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situation in these two schools is typical of the condition in normal schools generally, "credit hours" of teaching required do not give an adequate index to amount of work involved in teaching in comparison with the work required in other subjects. Of this fact persons who make normal-school programs and administer normal school credits should take cognizance.

In 22 of the 46 normal schools studied, practice teaching is done entirely in single hour periods, and in 18 of the 22 the groups taught include 15 children or fewer. Such teaching is valuable but needs to be supplemented by teaching for longer periods with larger groups of pupils, to be undertaken after the beginning teaching has been done in shorter periods with small groups.

The large number of untrained teachers who enter the school systems of the country every year has made necessary an elaborate, expensive, but as yet ineffective system of supervision. The value of supervision varies directly with the preparation of the teachers. So long as facilities for the professional preparation of teachers are inadequate and large numbers of untrained teachers must be employed the necessity for elaborate directive supervision will continue. But as the number of professionally prepared teachers increases, the burden of directive supervision should be lightened, and largely shifted to the normal schools. The teacher-training curriculum should include teaching under such conditions that the graduating student is prepared to undertake fully responsible teaching and to carry it on successfully under a minimum of supervision, and under supervision which is more clearly coöperative rather than directive. Single-period, small-group practice teaching does not give this preparation.

The Rhode Island State Normal School plan already referred to promises to accomplish the desired result of shifting the responsibility for supervision of teachers where they are just beginning, which is the time when there is the greatest need for supervision, from the public-school system to the normal school. During a fifth half year, following the two years spent in residence at the normal school, students in this school teach full time in city training schools under the direction of critic teachers who are members of

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the normal school staff. After June, 1919, a sixth half year was added to the curriculum, during which the student is to be a regularly employed teacher in a school system, but will be under the direct supervision of normal school teachers.

Several states now grant life certificates to graduates of normal schools only after a period—one year or two years—of successful teaching following graduation. But this teaching is not done under the supervision of normal school authorities, and in many cases is not even inspected by these authorities, the judgment as to whether the teaching has been successful being based upon the report of the principal of the school or the superintendent of the system where the teacher is employed.

The small area over which the graduates of the Rhode Island Normal School are distributed makes close supervision under the plan described easy. But the wider distribution of graduates of normal schools in other states does not make such supervision and extension of training impossible. No other half year could be added to the normal school curriculum so cheaply; probably no other could be more serviceable both to the graduating students and to the communities to which they go as teachers.

A very important type of contact with the training department which is not listed as a separate one in connection with any of the schools but is present in all is the contact through conferences that are incidental to practice teaching. Every student teacher has at least one hour of conference with critic teacher or supervisor each week at which all students working under the direction of the critic or supervisor are present. Many of them have short daily conferences with additional longer ones at irregular intervals. Sixty-three seniors in the Eastern Illinois State Normal School report daily conferences of from three to fifty minutes, the median being eleven minutes. What purposes these conferences serve and their importance in the training school work will be discussed in detail in section five.

The returns from the forty-six schools studied show that the separate courses in "Observation" are giving way to observation in connection with specific subject-matter courses, courses in psy-

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chology and education; observational work is also being required in connection with practice teaching. Only one school reported unsupervised, volunteer observation; fourteen submitted detailed directions for observation which are given to students who are to discuss the lessons seen with the teacher who teaches them or with the instructor in charge of the course in connection with which the observation is carried on. The more concrete the purpose with which the student goes to the demonstration lesson the more of value that lesson will have. The low median value attached to observation of teaching as a factor in preparation for teaching in the study reported in section one,—12.5 out of 100 points distributed among academic courses, professional courses, observation of teaching and practice teaching,—is probably due to the observation having been carried on in general observation courses instead of in connection with specific courses which would direct the observation toward very much more specific details of the teaching observed. This is indicated by an examination of the catalogs of normal schools published ten years ago, which represent the normal school curricula as they were when the larger number of the persons who contributed to this study were in normal schools as students.

CONCLUSIONS:

1. Normal schools differ among themselves more widely in the amount of student contact with the training department for which they provide than they do in the facilities which make such contact possible.

2. A very large number of the courses offered in all normal schools studied are, some in one school some in another, made to involve such contact. What is done successfully and profitably in one school can with certain limitations, be done equally well in another. More attention and effort should be given to making the excellencies of one school common to all.

3. The largest single element which reduces the amount of such contact is the lack of disposition and training on the part of

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normal-school teachers which would lead them to make such contact an important part of the work in their courses. Such contact to be profitable needs careful planning and supervision. Because poorly conducted observation is unprofitable it is easy to assume that observation is not worth while and that discussion of teaching problems can be made concrete and effective without the students actually "sensing" the schoolroom situation involving the problems.

4. Too little attention has been given to devising sorts of participation which will provide more active contact with the training school than does observation without the degree of responsibility involved in practice teaching, for which students are not yet adequately prepared.

5. In too many schools practice teaching ends with the teaching of a small group of pupils for a single period. It should be extended to include teaching with more nearly complete responsibility for longer periods with larger groups. This may be done without increasing the total number of hours of practice teaching required if that requirement is already as great as the curriculum will allow.

6. The possibility of student contact with the training department is reduced by the overcrowded program of normal-school teachers, particularly of members of the training school staff, and by lack of adequate training school facilities. The remedy for these conditions lies within the power of governing boards but a first step toward their improvement is the preparation, by the faculty, of a very definite program of what the school believes can be profitably undertaken with more adequate facilities and larger staff.

7. The administrative arrangement of more extended curricula in normal schools is underemphasizing the importance of adding courses which give additional contact with the training department. If normal schools are to justify the extension of their curricula to four years they must provide a sort of work in the last two years which is more valuable as professional preparation for teachers than are two years in a standard college or university added to two years of normal school preparation.

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IV.

PARTICIPATION BY NORMAL SCHOOL TEACHERS IN THE WORK OF THE TRAINING DEPARTMENT AND BY THE TRAINING SCHOOL STAFF IN THE WORK OF OTHER NORMAL SCHOOL DEPARTMENTS.

In the process of making the training school the central feature of the normal school, an indispensable step is the arousing of interest in the work of the training school on the part of members of the normal-school faculty who are not on the immediate training-school staff. As a means of arousing and sustaining such interest, or as a result of the interest already existing, normal-school teachers may properly be expected to participate in some very active way in the work of the training department.

John W. Cook, until lately president of the Northern Illinois State Normal School at DeKalb, Illinois, said before the Normal-school department of the National Education Association in 1914:

"There are few things that will do so much for a normal school as the teaching of children daily for all or at least for a good part of each year by the teachers in the normal departments. * * * It will be found that nothing else will have so potent an influence upon the character of the instruction in the normal classrooms. Theory will soon reduce itself to usable form and will test itself by its value as a schoolroom procedure. There will be little talk about method; but there will be a deal of thinking accomplished in the way of getting material into shape for use with children."[1]

In the report of the Commissioner of Education for 1915 a report appears on "Progress of Teacher Training" by Charles Hugh Johnson, from which the following extract is taken:

"A letter was addressed to presidents of normal schools requesting accounts of recent progress. 69 very full and satisfactory replies were received from 33 different states. * * *

[1] N. E. A. Proceedings and Reports, 1914, p. 547.

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Nine normal schools report an increase in student hours required to be devoted to practice teaching. Fourteen schools report plans whereby there may be closer affiliation and coöperation between the regular staff of teachers and the practice work. These reports indicate a shifting of emphasis from the scholastic development of pedagogical theory and educational science to the development of that theory and science which the instructor can illustrate in the model school."[1]

The movement for such correlation was started in a definite way at the meeting of the normal school section of the National Education Association in 1899, by the report already referred to. In that report it was recommended that:

"Heads of departments in the normal school should be supervisors in fact of their subjects in the training school as follows:

1. They should propose in writing to the principal the subject matter for the curriculum in their respective studies.
2. They should propose to the principal what seem to them the leading points in method involved in the presentation of the subject matter suggested.
3. They should assist the principal in supervising instruction of critic and student teachers in their respective duties, offering suggestions and exchanging ideas freely.

These duties should be performed by the heads of departments for their own good as well as for the good of the training school."

Whether or not the methods proposed in the foregoing are acceptable, the principle is beyong question a sound one. It has been restated repeatedly in the twenty years since the report was made. In furnishing the material for the present study sixteen principals of normal schools, directors of training and principals of training schools have made unsolicited statements of the soundness of the principle.

It is not less important that members of the training school staff should take part in the teaching of normal school classes. The same end is accomplished, namely, correlating the work of the training school with that of the other departments of the normal school, and the additional benefit follows that the status of the critic teacher and supervisor is raised both in the eyes of other teachers and in the estimation of students. It also mobilizes much

[1] Report of the Commissioner of Education, 1915, pp. 525 and 530.

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expert teaching ability. It is safe to assert that the percent of critic and supervising teachers in training departments who can conduct classes of adult students successfully is much greater than the percent of normal-school teachers who can conduct classes of training school pupils with an equal degree of success. It is not implied that every teacher should be able to do both sorts of teaching equally successfully. But it is urged that, in so far as people who can do so are available, it is greately to the advantage of a normal school to have such persons on its staff.

The data for this section come from the replies made by principals of normal schools and of training schools to the two questions:

"What members of the teaching staff of the normal school participate in the work of the training department? What is the nature of the participation in each case?

"What members of the staff of the training school participate in the work of the normal school other than in that of the training department? What is the nature of the participation in each case?"

Usable replies were received from 43 of the 100 schools to which the questions were sent. The following states are represented in the replies:

Georgia	Missouri	Oklahoma
Idaho	Montana	Pennsylvania
Illinois	Michigan	South Dakota
Kansas	Nebraska	Tennessee
Kentucky	New Hampshire	Texas
Louisiana	New Mexico	Virginia
Maine	New York	Washington
Maryland	North Carolina	Wisconsin
Minnesota	Ohio	

The following table gives the summary of the types of participation reported and the frequency with which each was reported:

SUMMARY OF TYPES OF COOPERATION BETWEEN NORMAL DEPARTMENTS AND TRAINING DEPARTMENT IN FORTY-THREE SCHOOLS.

	Schools so reporting.
1. Training school staff part of general normal school faculty for all purposes.....	23
2. Training school supervisors, but not room teachers, part of normal school faculty for all purposes.....	5

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		Schools so reporting.
3.	Entire training school staff part of normal school faculty only for consideration of matters of training school policy	3
4.	Head of training department gives courses in department of education	35
5.	Principal of training school (a separate person from director of training) teaches classes in normal school	4
6.	Normal school teachers supervise practice	8
7.	Normal school teachers determine methods to be used in various subjects in training school	2
8.	Normal school teachers act as advisers to training school staff in some definite way	4
9.	Normal school teachers make course of study for training school, in whole or in part	7
10.	Normal school teachers teach demonstration lessons	6
11.	Normal school teachers of drawing, manual arts, domestic science and art, physical education teach their subjects in training school also	19
12.	Normal school teachers of other than special subjects mentioned above give instruction in training school	7
13.	Critic teachers give instruction in normal school during regular terms	15
14.	Critic teachers give courses in normal school in summer session	6
15.	Standard tests are given in training school by members of normal school faculty	5
16.	Normal school teachers and critic teachers give joint courses in observation	11
17.	Teachers in normal school and training school visit one anothers classes systematically	3
18.	Normal school instructors hold conferences with training-school staff upon invitation	2

The list is not an exhaustive one for the schools concerned. There can be no question, for example, that there is much more mutual visitation between the training department and other normal school departments than the list indicates. It is probable that in schools where it is carried on extensively it is so clearly taken for granted that no special mention of it was made in the reports. In one of the cases where it was mentioned, it was spoken of to call attention to the limited degree in which it takes place. That it is not universal, however, is indicated by the statement of a training-school principal who reported that, in the school with which he is connected, some normal-school teachers who have been in the school for ten years have never set foot in the training school. The figures for the eighth, sixteenth, and eighteenth items

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are probably very much too low to give a fair picture of the situation in the forty-three schools concerned. Other items may also be present in more schools than the data show.

Nor can mere enumeration of definite items of participation give an adequate idea of the situation in a school. President Bohannon, of Duluth, writes:

"The training, experience, and ambition of those who work not only in the training department but in the normal school, are of much greater importance than the organization itself. * * * Given people who know what the problem of dealing with children of the elementary school is, and who are interested in the problem as they should be, and who are willing to give their best to it, most of the questions relating to organization become, relatively speaking, minor questions."

The value of such a list as is here given, obviously incomplete in the number of items and even more incomplete in the numbers of schools which the available data show to have coöperation in the ways listed, is to give suggestions as to possible ways in which there may be coöperation. Not only the disposition to coöperate, which President Bohannon mentions, is essential, but also some degree of skill in coöperation and knowledge of ways in which to coöperate. The officers of twenty-one schools from among the forty-three with whom correspondence was carried on in making this study state that they are seeking for a solution for the problem of bringing about a closer relation between the training department and the academic and professional departments of the schools with which they are connected. Only three say that they believe that the problem has been satisfactorily worked out in their schools. The interest attaching to any one of the eighteen items listed depends upon the organization of each particular school which may contemplate that item as a possible new means of attack upon the problem rather than upon the number of schools which have already attempted to make use of that means.

Of the twenty-three schools reporting that the training school staff as a whole are a part of the general normal-school faculty for all purposes, all state definitely that there is no distinction of status between training school teachers and other normal-school teachers. In only six cases is the reservation made that there is

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a distinction made as to salary. What the other seventeen answers mean is, probably, that there is theoretical equality in spite of salary differences. But so long as considerable salary differences exist there is, of course, a very real difference of status. That there is a distinction as to salary is indicated by all available figures.

Judd and Parker[1] give, as a typical salary distribution, an instructors pay-roll in which the median salary for all teachers, administrative officers not included, is $1,600; for critic teachers, $1,000.

They cite as a typical salary scale for a larger school, a pay-roll showing a mediam for salaries in departments other than the training department of $1,400; for critic teachers, $1,200. For one Illinois school they report: president's salary, $5,000; salary of director of training, $4,500; salary of professor of pedagogy, $3,455; salary of one critic teacher, $2,000; salary of other critic teachers, about $1,000. In suming up the relative salaries of critic teacher and teachers in other normal-school departments they say:

"The point of departure for our consideration here is the fact that every normal-school graduate who has had the good fortune to teach for 100 hours under the careful supervision of a superior critic teacher has probably profited more in terms of efficiency from this experience than from any 1000 hours of departmental instruction in the normal school. * * * We shall not attempt to give a precise answer to the question which we have raised, but shall say in general that some normal schools would greatly increase their concrete effectiveness by subtracting money from the salaries of departmental instructors and using it to increase the effectiveness of the supervision of practice teaching."[2]

The salary scale for teachers in the training department and for teachers in other normal school departments can be equalized by other means than reducing the salaries of departmental teachers; but the essential thing is that the salaries should be equalized if persons of adequate ability and training are to be secured for the ciritic positions. It is to be regretted that President Keith, in an address before the Normal-school department of the N. E. A. in Chicago in 1919 proposed a salary schedule for normal schools

[1] Problems Involved in Standardizing State Normal Schools, 1916, p. 71.
[2] Ibid, p. 72.

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which contemplates substantially lower salaries for critic teachers than for other normal-school instructors.

The single item reported most generally from the schools from which data have been gathered, whereby the training department and other normal-school departments are brought into relation, is through having the director of training a member of the department of education, giving instruction in that department; so reported from thirty-five schools. In nineteen of these thirty-five the head of the training department is also head of the department of education. In five schools all members of the training school staff are members of the department of education.

This represents an encouraging approach to the standard suggested in the "Curricula Designed for the Professional Preparation of Teachers For American Public Schools" where, in section nine, it is stated in regard to correlation of training departments with other normal school departments:

"The correlation above suggested should be particularly close between the courses in psychology and educational theory on the one hand and the courses in practice teaching on the other. To this end, all of these courses should be coordinated under the general control of the director of the training department."

The most conspicuous failure to reach this standard is in connection with the courses in psychology. In only eight of the thirty-five schools in which the director of training gives courses in the normal school is the course in psychology one of the courses given. History of education is taught by the director of training almost as often as is psychology (seven cases). The courses most frequently given are methods courses (nineteen cases); courses in theory of education (eleven cases); philosophy of education (five cases). The same director of training is counted more than once in these figures where he gives more than one course. In three other schools the teacher of psychology participates in some way in the work of the training department. A possible solution for the present pressing problem of making the teaching of psychology in normal schools more effective is to be found in establishing intimate relations between the teacher of psychology and the training department. Detailed suggestion for bringing the teaching of psy-

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chology into relation with the training department are given in the latter part of this section.

The degree to which normal school teachers may advantageously superivse practice teaching is hard to determine. Supervision is a difficult matter under the most favorable conditions and to divide the responsibility for supervising any single group of practice teachers between critic teacher and normal-school instructor makes it even more difficult. One normal-school president states definitely that it does not work. Barton, in an unpublished history of normal schools in the United States, submitted as a master's thesis at Columbia University, says of the Ypsilanti, Michigan, normal school:

"An attempt was made to have the teachers in the normal supervise the teaching of their own particular branches in the training school, but this was found impossible and it was urged that special competent critic teachers be employed for supervision and criticism."

The plan reported by one school furnishing information for the present study has much of merit in it. Each department holds itself responsible for making available for practice teachers, and seeing to it that they avail themselves of it, the material which can be made use of in the training school in the subject for which the department is responsible. The responsibility of the departmental teacher is to see to it that the practice teacher is making use of the material provided. The method of its use is in the hands of the critic teacher. This brings the departmental teachers into a very intimate relation with the practice teaching without encouraging at all upon the duties of the critic teacher, and at the same time relieves the critic teacher of a task which she ordinarily has to perform in addition to her other duties.

The construction of the curriculum and writing of the course of study for the training school by normal-school teachers has the advantages which President Felmley points out:

"The curriculum of the training school was written by the various departments of the normal school and is by them from time to time revised in consultation with the training school teachers. We make this requirement * * * in order to keep the teach-

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ers of the normal departments in constant touch with the training department."

This advantage is in addition to the benefit to the training school of having a well made curriculum and course of study, the importance of which Dr. C. A. McMurry points out:

"A training school requires a definite and well organized course of study. Inexperienced teachers cannot be allowed to wander at will through a haphazard course of study. The important topics in each study should be well selected and arranged beforehand by the most experienced and competent teachers. * * * This is indeed a fundamental problem for the whole faculty of a normal school, including heads of departments and critic teachers. The heads of departments, each in his special field, should be the best qualified people in the world to show up the full and adequate treatment of topics needed in the training school in geography, history, mathematics, literature, etc. This is the hardest problem we have to meet in the training school. People have taken it for granted that anybody (even young teachers) could do this, and nobody has done it. In fact, nobody has yet demonstrated the full ability to do it. The extent to which it has been attempted has shown its extreme value for securing training school efficiency."[1]

In many schools some contributions have probably been made by normal-school teachers, in an incidental way, to the course of study of the training school; in few has there been a systematic and thorough-going attack of the problem. It is one of the most promising of all of the means suggested for correlating the work of the training department and that of the other normal-school departments.

Opinion expressed in the letters received is very much divided as to the importance of having normal-school teachers able and willing to teach demonstration lessons. One president says: "They do not teach demonstration lessons but there is no rule forbidding them to do so." Another says: "Every teacher in the normal school can and does teach children in the training school occasionally, some of them very frequently." A third writes: "None of our normal school teachers give demonstration lessons. It is not necessary that they should since critic teachers are always ready to teach for observation." Dr. Bagley includes among the

[1] Northern Illinois State Normal School Quarterly, May, 1915, pp 4-5.

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qualifications of a normal-school teacher the two items of teaching skill and experience in teaching children. It is possible that a normal-school instructor might qualify in both and yet be unwilling to undertake to teach a demonstration lesson, and it might be a useless expenditure of energy on his part to undertake to do what a critic teacher could do equally as well and more easily. That the ability to teach children is one which can be used effectively by a normal-school teacher is beyond question. Dr. Bagley reports as an impressive experience the teaching on one day, by the teacher of history in the Ypsilanti normal school, of certain facts in history to his normal school class, and the teaching by the same teacher of the same facts on the following day to a group of children, in the presence of the same normal school students. Every student who has worked in history at Teachers' College has been impressed by the ability of Professor Henry Johnson to teach history to children with the same skill with which he teaches his classes of adults.

In addition to keeping normal-school teachers in contact with the problem of teaching children, the teaching of demonstration lessons adds to the weight which the normal school teacher's instruction carries with students who know that the teacher has such skill in teaching children. It dignifies skill in teaching children in the eyes of normal-school students to see normal-school teachers making use of such skill.

The relatively large number of teachers of special subjects, (drawing, manual training, music, household arts) who teach both normal-school and training-school classes is explained by Judd and Parker, who found the same situation in 1916, as follows:

"The teachers of the so called special subjects * * * serve in both the normal school and in the practice school. In almost any small normal school, one teacher to teach each of these subjects in both schools ought to be sufficient. Each teacher, as a rule, should be required to do this instead of using a part of his or her time in the very expensive instruction of small groups of normal-school students in special curricula."[1]

Doubtless the suggested economy is in part the motive for this dual function on the part of these special teachers, but this

[1] Problems Involved in Standardizing State Normal Schools, 1916, pp. 68-9.

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explanation does not cover the several cases reported where the schools have a number of such teachers;—seventeen in the case of Normal, Illinois. The possible supplementary explanations that suggest themselves are:

1. That there is less difference between teaching children and adults to draw, to cook, to sew, than there is between teaching English, science, history on the lower and higher levels.

2. That there are no traditions back of these departments which differentiate sharply between elementary school work and work with adults. There is no feeling of condescension in teaching children.

Whatever the explanation for the fact may be, the situation as it exists calls for a review of reasons why teachers of "academic" subjects cannot participate in the work of the training school as do the teachers of these special subjects.

An example of what may be done in making normal-school teachers active advisers in the training school is the plan put into operation at Platteville, Wisconsin, by President Asa M. Royce, described as follows by Edgar F. Riley, director of the training school:

"In addition to the special teachers we have what are known as 'Consulting Supervisors'. These include regular teachers in the normal school, of arithmetic, geography, English and history. These people are assigned one hour a day to the training school. * * * These consulting supervisors visit classes and are then supposed to confer with the regular critic in charge and with the assistant principal or with the principal. The term 'consulting supervisor' suggests the character of their work. * * * Occasionally the principal has one of these consulting supervisors talk to the practice teachers or conduct a model lesson, or criticize a model lesson, or take a group of practice teachers for conference, the history teachers going to the history teacher, etc."

It must be a rare situation where critic teachers and normal school teachers cannot be of mutual help; it is almost equally rare when anything like the maximum of help is given where there is no definite provision made for supplying situations in which help may be mutually given. There are probably no schools in which teachers from the normal-school departments will not confer, upon invitation, with the members of the training-school staff. But

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there are many where such invitation is never given. It is quite possible that there might be some feeling of constraint and a lack of topics to confer upon if regular conferences were scheduled between normal school teachers and training-school staff. But both conditions would unquestionably be changed if there were real disposition to be mutually helpful.

The courses given by critic teachers in the normal school are, for the most part, methods and observation courses. Even in cases where no such courses are scheduled, the weekly conferences between critics and student teachers are practically equivalent to such courses. It is quite as important that there should be normal-school courses given by critic teachers as that normal school teachers should participate in the work of the training school. Critic teachers get as quickly out of contact with the work of the other normal-school departments as do normal-school teachers with the work of the training department. To give courses to adult students is a stimulus to growth on the part of the training school teacher.

Director John C. Werner of the training school at Albion, Idaho, says:

"Each of the critic teachers, at some time during the year, gives at least one course in the normal school. We feel that there is great need for all normal-school teachers to come in close contact with the children in the training school by actual teaching some time during the year, and we feel that it is also vitally important that each critic teacher be closely related to the work of the normal school and its students by teaching classes in the normal school occasionally."

President Black, of Ellensburg, Washington, tries to get for critic positions, persons having some specialty which they can teach in the normal school. By so doing he accomplishes the double purpose of keeping them in close touch with the normal school, and of being able to pay higher salaries than he could pay for critic work alone.

The fact that critic teachers give courses in the normal school in the summer session in five schools where they do not do so during the regular term indicates that the courses which they offer are considered to be of especial value to teachers in service, since it is

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such teachers who make up the larger part of the summer attendance. The condition which prevents regular courses being given by critic teachers during the regular term is the overcrowded program of those teachers. Any change which lightens that program will make possible the giving of some time by the critic teacher to instruction in the normal school.

For normal-school teachers to determine the methods of instruction in the training school, as two schools report that they do, seems, as stated, to be an undesirable imposition of theory upon practice. The more desirable situation would be a determination of methods by teachers of the normal-school departments and of the training school working together in the same manner in which the course of study for the training school should be worked out.

A field of common interest and activity for normal-school and training-school staff, which centers about the work of the training school, is the use of standard tests and scales. Only five schools report any coöperative activity in the use of these devices. Few schools will find it possible to undertake work in the research aspect as is done at Emporia, Kansas, or to attempt the very wide service in the use of the tests in communities of the state as is done at Emporia. But every school should be very much alive to the development of these useful means for determining the attainment of pupils and the efficiency of teaching. In most normal schools, interest in these tests is confined almost wholly to the members of the department of education. The critic teachers are probably more familiar with them than are most of the normal-school teachers.

At Madison, South Dakota, a very thoroughgoing survey was made in 1917-18 of the work of the training school, under the direction of Miss Candis Nelson, director of training, with the coöperation of the training school staff. The results are published as a bulletin of the normal school under date of July, 1918. No member of the normal-school faculty other than the training-school teachers took part in the survey, which involved the use of many of the standard tests. But it suggests a sort of undertaking in

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which a number of teachers both within and without the training school might very profitably take part.

While the derivation of these standard tests should be primarily a function of department of education in universities and normal colleges, they should be given to the students in normal schools as part of the courses in the various subjects to which they apply rather than in a single course given in the department of education. This means that each department will be familiar with the tests that have been devised for its special subject and will include in the subject-matter courses (or in the methods courses, if they are given separately) exercises which will give sufficient experience with the tests and their uses to enable the student to use them intelligently and to be guarded against their misuse.

Coöperation of normal-school teachers and critic teachers in giving courses in observation, as reported by eleven schools, serves both to bring the normal-school teacher into contact with the training school and the critic teacher into contact with normal-school students, provided that the normal-school teacher and critic arrange the observation jointly and both take part in the discussion of the lesson seen. Under any other conditions observation represents considerable waste. The discussion, under the leadership of one teacher, of a lesson taught by another, the teacher who taught the lesson not being present, is unfair to the absent teacher and less profitable to the observers than is a discussion in which that teacher takes part, since only she can know the "why" for the details of the lesson and because she will be willing to point out the weak points in the lesson seen as another teacher might hesitate to do.

The ability to undertake these coöperative enterprises which bring training-school teachers and teachers in other normal-school departments into closer relations, is an important qualification for normal school teachers. Judd and Parker said in 1916[1]:

"Among the most important characteristic of a normal-school faculty from the standpoint of serving the purposes of the state in training teachers are (a) the degree of *coöperative interest* manifested by the faculty in the training of prospective teachers for the real, concrete, detailed tasks which they will undertake when they begin to

[1] Problems involved in Standardizing State Normal Schools, 1916, p. 65.

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teach, and (b) the competence of teachers to give such training. Normal-school teachers should be more interested in the regular daily work of public schools than in anything else, and they should be willing and able to coöperate heartily in giving students training for such work. The most important measure of the efficiency of a faculty that is composed of competent individuals is the extent to which this coöperative interest dominates the work of the normal school."

These writers go on in the same paragraph to say:

"Neither the competence of the individuals composing a faculty nor its coöperative interest in normal-school tasks can be fairly judged, as a rule, from printed catalogs or reports or from answers to questionnaires."

It is because this impossibility is fully realized that there is no table given here in which schools studied are listed each with the type and amount of participation which have been reported. The purpose of this section is not to find out what each school is doing and to compare one school with another as to the degree in which coöperation of departments is present. The purpose is to suggest a list, based upon what is being done in as many schools as it has been possible to study, of types of coöperation which are being used, in the hope that such a list may be useful in suggesting to persons interested in this problem, ways not yet tried in the particular school with which each is connected in which fuller coöperation may be brought about.

Dr. Bagley summarizes the case for participation in training school work by normal-school teachers and in the work of other normal school departments by training school teachers, as follows:

"The great advantage of a professional school lies in the fact that it can concentrate its work upon a single objective or upon a group of related objectives. In other words, it can organize all its activities into real curricula. It can articulate and integrate its courses, it can insure from every instructor and every department of study a maximum contribution to the common problem; it can even capitalize the life of the school itself in the interest of the purposes for which the school exists. If the professional school does not do these things, it misses a golden opportunity."

These efforts made by normal schools to professionalize the courses which make up their curricula by so administering them that they bring the student into constant contact with the training department have been found to be scattered. No one school is doing everything that is being done somewhere among the schools studied. It is unreasonable to expect that every school shall do

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everything as well as any school does anything, but it is reasonable to expect that every school shall attempt to do as well as it can the things which other similarly situated schools have found it profitable to do in accomplishing the purpose which is common to all. There should, however, be less difference in the sorts of things done in normal schools than there now is. Individual differences among schools are inevitable and in some degree desirable, but it is time that some degree of agreement was reached as to what is the best way to accomplish the task that normal schools have undertaken.

Upon the basis of the review just made of what various schools are doing, it is proposed to suggest in detail how the varieties of student contact with the training department and of participation by normal-school teachers other than the training-school staff, in the work of the training school, which have been found among the schools studied, might under favorable conditions be put into operation in a single school.

Let it be assumed that this school is located in a city of 10,000 people; that it graduates from two year curricula 120 students a year; that it has a school for observation and practice connected with it and that the schools of the city are available for apprentice teaching.

Let the curricula offered be assumed to be the three two-year curricula outlined under sections twelve to thirty-two of the Carnegie Foundation "Curricula Designed for the Professional Preparation of Teachers for American Public Schools."

The first term of work is identical for all the three curricula. During this term, contact with the training department is incidental to the work of the course "Introduction to Teaching." Students will see teaching in the primary, intermediate, and grammar grades. The teaching seen will be discussed under the direction of whoever has charge of this course and of the teachers who teach the lessons seen, particular attention being given to analysis of the qualities which these teachers find essential in persons who undertake work in their respective departments. During the second half of the course students should make tentative election

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of the curricula which they intend to follow and should then be given assignments under the direction of the critic teachers in the corresponding departments of the training school, for the purpose of becoming acquainted with pupils of the particular age which it is their intention to prepare to teach.

Assuming that one half of the first-year students take the course "Introduction to Teaching" at one time, there will be sixty students for whom to provide forms of participation. Let it be assumed that one of the city schools is near enough to be used for this purpose as well as the observation and practice school of the normal school.

All of the participation is to be arranged for and reported back to the person in charge of the course "Introduction to Teaching," who may well be the head of the training department; but it may be work connected with some one of the other courses that the student is carrying during the same term.

Students in the course in school and personal hygiene may be made responsible for the lighting of all classrooms in the elementary schools for certain hours of the day, and for ventilation, if heat and ventilation are not cared for by an automatic system. They may be made responsible for the oversight of the children's clothing, wraps, rubbers, and lunches in the lower grades. The cloakrooms may be put in their charge. If medical or dental examinations are going on. students may act as assistants to the examiners, doing nothing more important, perhaps, than taking children through the halls to and from the examiners' office as they are wanted, or recording data for the examiners.

Students from the course in physical training and games may be used in the supervision of playground activities of children. If each room has its own recreation period, sixteen students could be so provided for in each school each day if no other form of participation could be provided. Intramural sports could be arranged and carried on under the supervision of these students, acting under the oversight of the physical-training director.

Students in the course in music could take part in the music work in the grades. Those able to play the piano could act as

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accompanists for room singing if a piano is available for this singing; could play for gymnasium work and kindergarten plays.

The course in English could arrange participation. Classes in the elementary school should be observed by students for the purpose of listing errors in oral English and their frequency. These should be reported to the English teacher and plans made for campaigns for more correct English, such as a "Better English Week," and the plans carried into effect when perfected.

Students in library technique could be made responsible for helping upper grade pupils in finding material upon subjects connected with their school work, or could be asked by teachers to place in the schoolroom on certain days appropriate material for use in the study of the topic that is to be taken up on that day. In the same way students in biology could be called upon to provide materials for nature study work and to arrange for and to carry out simple demonstrations.

Students from the course in handwriting could do blackboard writing for the room teachers in the elementary schools. The upper part of the blackboard in primary rooms is not available for pupils' use and may be kept filled with stanzas of poems with which the children may well become familiar; these should be changed frequently. In the upper grades there are rather extended assignments and occasional outlines to be written on the board. These same students may be given pupils' written exercises to grade by use of one of the standard handwriting scales and may do individual work with pupils whose writing needs particular attention.

It must be fully understood that this student "assistance" in the training schools does not mean any lightening of the work of the teachers "assisted." The students concerned will be immature and inexperienced. Their zeal may be great but their skill will be slight. Even when more mature students are concerned it is safer to assume that every additional student who goes into the training school increases the work of the training-school staff. It will be an unwise administration which considers that by "relieving" the critic teacher of the necessity for doing a part of the necessary blackboard writing, of some recess supervision, of some

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care for materials, her work is being really made easier, for the work of the student should be primarily educative to him, and should, in consequence, be carefully supervised. To carry out such a program as is being here outlined would require a large training-school staff, and not fewer than two eight-room city schools in addition to the school for observation and practice connected with the normal school.

In the second term of the first year, psychology will be given as part of all curricula. This course should involve a maximum of contact with the children of the training schools. Unless the position of psychology in curricula for the professional preparation of teachers is to become as precarious as that of history of education, some very decided changes from the sort of work which is being done in the larger number of courses in psychology must be made. A course in psychology whose organizing principle is the list of chapter headings in a textbook in general psychology will present little occasion for the observation of teaching or of child activities outside of the classroom. The course which should be given is one which will be illuminated by observation of children and will in turn illuminate such observation. The way to become acquainted with children is to be with children. Psychology can analyze, interpret and make significant the data gathered by observation but cannot serve as a substitute for it. It is being found worth while to bring psychology courses into close relation with training-school work where it is being tried. More teachers of psychology in normal schools need to be stimulated to make the experiment.

The first topic listed for consideration in this course as outlined in the curricula being considered, is instinctive tendencies. Students should observe children in the classroom, on the playground, in as great a variety of situations as possible for the purpose of discovering common, apparently spontaneous ways in which children behave apart from training, which may be made the basis for class discussion of unlearned tendencies. They should try to discover in the observed behavior of children the modified forms of these tendencies which have resulted from training. They should try to discover in the teaching of the critic teachers the

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use which the teachers are making of their knowledge of the instinctive tendencies of children.

The second topic in the course is habit formation. The work of the elementary school is full of illustrative material for this topic. Drill lessons should be seen and the method discussed in respect to how the laws of learning are taken advantage of; drawing lessons and writing lessons, manual arts and certain games will illustrate the acquisition of manual dexterities; schoolroom routine will show habits in various stages of formation.

Memory, association, and economy of learning, the third topic of the course, will find as ample illustrative material as that available for habit formation. To the student already familiar with the laws of learning any lesson that is well taught will show these laws in operation. He should try to find how the child tries to remember when unassisted, what sort of associations he forms, how he studies and how the teacher helps him to study different sorts of material more economically. He will find that what is commonly spoken of as "teaching the child to study" must be analyzed into "teaching the child to study arithmetic," "teaching the child to study geography," "teaching the child to read a book," and giving him special skills in working with all of the different sorts of material which make up the elementary-school curriculum. Observation should be carried on over so extended a period that the rate of learning and the pauses in improvement—the "plateaus"—may be observed. Losses due to incidental absences in the cases of individuals, and in the case of the whole class, over a week-end or after a holiday should be observed in subjects where the measurement of attainment before and after the interruption is possible. If different classes are doing similar work under different conditions as to distribution of learning periods, a comparative study may be made. The presence of these students of psychology in the training school may serve as a stimulus to training-school staff and department of education to attempt simple experiments in learning which would not otherwise have been undertaken.

The fourth topic is the affective life. The same observations which gave data for the discussion of instinctive tendencies will

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furnish material for the discussion of this topic. A study of the books which boys and girls of various ages read from choice will give an interesting index to the things which make an emotional appeal to them. Members of the psychology class who are also taking the course in children's literature during the same term should be able, in connection with telling stories to children, to get data upon the emotional life of these children, of interest to the class in psychology.

Topic five is the thought processes. Students may set for themselves the task of finding the answer in specific instances to the question which teachers ask at times with some degree of irritation,—"How did you happen to think that?"—when a pupil has given expression to what is, by adult standards, a wild idea. Students should become habituated to thinking of lesson procedure in terms of what stimulus-response bonds are being formed and to analyzing thought processes in terms of the bonds concerned. They will get material to be so analyzed by observation of lessons where thinking and learning are going on. A third grade class reading "Alice in Wonderland," reading perfectly so far as correct pronunciation and expressive inflection are concerned, will give interesting and instructive insight into what goes on in the minds of children as they read, when questioned as to the significance of the descriptive words of which the story is full. A more scientific type of data on thought processes may be obtained by the use of the simpler completion tests and of appropriate tests from the Binet scale, which the class should see used, although the course is too short to make it possible for students to acquire the technique of testing for themselves. In addition, much of interest and of value can be contributed by students who, because of a combination of personal aptitudes and opportunity, become so well acquainted with particular children of various ages that these children talk freely of what they are thinking about.

"Observation and Participation" in the first term of the second year may become the correlating center for participation in the work of the training department as the course "Introduction to Teaching" was the center during the first term of the first year.

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The forms of participation will be determined in part by the work being done in connection with the subject-matter courses. The participation should be pointed very directly toward practice teaching. The observation and discussion groups should be arranged to separate the persons following the different curricula. Students will be assigned in groups of two or three to particular grades and subjects for at least a part of the term; they will prepare the lessons as if for teaching and observe the class as taught by the critic teacher or, on some occasions, by student teachers. They will sit in the class as members of the class, being called upon at times to contribute to the class discussion and to lead the discussion, as is done in the Wisconsin "Directed Teaching" plan.[1]

On two or three occasions each should teach the class, after carefully supervised preparation, with every condition that can be controlled made as favorable as possible. so that the first actual teaching experience shall be a successful one. If possible each student should do a week or more of such carefully supervised teaching for one hour a day in preparation for the more extended practice teaching to follow. Each may do as much work as can be arranged for with individual pupils who need help or with very small groups of pupils.

In the second term of the second year practically the whole of the students' time and energy is to be given to practice teaching, the courses in class management and the technique of teaching and in the technique of tests and scales being so conducted that they become a part of the teaching conferences. Each student teacher will have two hours of teaching daily from the beginning of the term and before the end of the term will teach a complete half day for a week or more.

The department of education will contribute to the practice teaching by supervising the testing of results; by participating in conferences with practice teachers where particular problems of teaching are discussed and current literature of education reviewed. All members of the department should keep such office hours that practice teachers who find themselves confronted by any peculiar

[1] 18th Yearbook of the National Society for the Study of Education.

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difficulty in their teaching, or are in need of help in planning a particular piece of work, may avail themselves of expert help.

In the plan for the "Administration of the Suggested Curricula" which accompanies the curricula from which are chosen the three which the school under discussion is assumed to be offering, it is planned that "each department of instruction would be held responsible for certain phases of training-school supervision." This would insure the maximum contribution by all of the normal-school departments to the work of the student teachers. The distribution of responsibility between critic teachers and department teachers has been reported, by the schools studied, to be difficult. The most promising arrangement found is that in which the normal-school departments devote their principal attention in connection with practice teaching, to making available all the material possible in their respective subjects for the use of student teachers, leaving to the critic teachers the supervision of the use of this material in teaching.

In addition to this service, the appropriate departments will be called upon to give assistance in correcting defects which the student may show in his preparation. If the student is handicapped in his teaching by a poor voice or faulty enunciation he will be sent to the teacher of reading and voice training for special corrective work. If his posture before the class is bad the physical training department will be called upon to help in correcting the defect.

Each student teacher will be kept continuously informed as strength and the weaknesses of his work, by means of score sheets which contain detailed analysis of the factors that contribute to good teaching. Students should be required to score their own work as an encouragement to self-criticism. Critic teachers in conference with student teachers will try to develop this ability in self-criticism and will point out and commend the excellencies of work done; will point out weaknesses which the student has failed to realize; and will by advice, by suggestion, and by demonstration show how defects are to be overcome and teaching problems met. The student will be led to discuss his teaching in terms

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of its effect upon pupils, and to watch carefully for the results which his teaching is producing in "accessory and concomitant" learning as well as in "primary" learning.

The special courses of the different curricula will occupy most of the students' time during the second and third terms of the first year and a part of the time during the first term of the second year, each having to do with specific problems of certain grades of the elementary school. They will be conducted, through the coöperation of critic teachers and subject-matter teachers, in close relation with the work of the appropriate grades. Both observation and participation will be provided for in these courses. Students in industrial art will take part in primary hand work; students in art courses for intermediate and primary grades will make blackboard drawings illustrating reading and literature work for these grades and will give assistance in pupil projects in the carrying out of which drawing can be made useful. The literature course and the reading and voice-culture courses will combine in preparing students to read and to tell stories to small groups of training school pupils. Geography and nature-study courses will give opportunity for collection and arrangement of materials for use in training-school classes in these subjects.

In the work of the teachers' courses in upper grade work, participation will be less easy to arrange and observation of expert teaching of the subjects will form a more prominent part of the contact with the training school afforded by these courses. Here the "Directed Teaching" plan of participation already referred to can be used especially effectively.

Courses such as "Types of Industry and Occupation" and the "summarizing" courses of the third term of the second year will involve little or no direct contact with the training department.

The general objection to putting into operation such a program as that just outlined is that it would mean that the training schools would be completely overrun with normal-school students. The only aspect of this objection which deserves serious consideration is whether the presence of these students in the

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training school would seriously interfere with good work on the part of pupils. The training schools are conducted for the benefit of two groups: the pupils, and the students of the normal school. The welfare of the second must not be allowed to jeopardize that of the first. Unless it can be definitely shown that the work of pupils in the training school suffers by reason of the presence in the school of many normal-school students, the objection that the training school will be "overrun" is not a valid objection.

It may be objected that the training school cannot take care of so many students. The answer to this is that training-school facilities must be increased. If normal-school administrators and teachers really believe what they have repeatedly asserted, namely, that the training school is the center and heart of the normal school, they should spend more effort in making the training-school facilities fit the work that is to be done instead of being content to cut the work to fit the facilities that happen to be easily available. A campaign of educaion will have to be carried on to change the situation described by the director of the training department in one of the Wisconsin Normal Schools. He says:

"The training school is not the factor in the normal school that it should be, and one of the reasons for that fact with us is; it is not the advertising proposition that other departments of the school are. It is much easier to get money for a football field than it is to get money for needed furniture and apparatus in the training school. We need a training school building here to house the grades and junior high school, but we can get $100,000 for a science hall easier than we could get $25,000 for a training school." The public, from whom must come the funds for the support of teacher-training institutions, must be stimulated to look upon the training department as the one part of the normal school which above all others must be well equipped, as it now looks upon the clinic facilities of the medical school and upon the laboratory and shop equipment of the engineering school. If more funds become available for the preparation of teachers, a generous share should be devoted to providing needed training facilities with adequate staff paid adequate salaries.

It may be urged that normal school teachers would be little inclined so to conduct their courses that such contacts with the

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training school as have been outlined would be involved. The president of a New England normal school says:

"This school, with some teachers who have been here thirty-five years, finds it necessary to employ normal-school teachers in the training school in over-limited ways. As new teachers take the place of older ones they are taking up the training-school work."

The evidence of the preceding sections shows that there are teachers to be found who are willing and able to carry out the sort of program outlined above. In too many schools of all grades the welfare of pupils and students has been too often sacrificed by administrators who find it easier to bear responsibility for having reduced the educational opportunities of students and pupils than to bear the emotional strain of removing or very sharply stimulating inefficient teachers. Normal schools need teachers who have particular abilities and interests, and it is essential that competent persons be sought and offered such inducements that they will come into and stay in normal school work. Any hardship or inconvenience involved for persons already teaching in normal schools, who cannot do the sort of work that needs to be done in a school for the professional preparation of teachers, is to be regretted; but, while such suffering may be acute at the moment, it will be an economy of suffering to have it concentrated rather than to have it long continued in the form of irritation and distaste attendant upon remaining in the sort of work for which one is not well fitted.

To the program proposed it may be objected that to have so many persons giving courses which involve contact with the training department would bring about duplication, confusion, and congestion of work in the training school. Such need not be the case if the work is planned carefully well in advance by all teachers and departments involved. There is too much completely independent departmental work in most normal schools; too little occasion for interdepartmental conferences and joint planning.

The objection is sure to be made that normal-school teachers are already so overloaded with work that the additional conference hours and the oversight of students who undertake work

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in the training department would be impossible. Available statistics do show that normal-school teachers very generally teach more than eighteen hours a week[1], but there is no available evidence that the teaching week involves over forty-five hours of work, which would be the normal amount if it is assumed that fifteen hours is the maximal teaching load and that each hour of teaching involves two hours of preparation or other related work. Normal-school teachers do comparatively little research work. Their tenure is long. Teachers who teach the same courses for a number of years tend less and less to revise and add to the courses as they are repeated. If each teacher who is now devoting forty-five or more hours a week to school work were to be excused from taking any part, it is not improbable that there would still be, in many schools, teachers available with a sufficient margin of unassigned time to carry out the proposed program. If not, then governing boards must be convinced of the desirability of some such program and of the necessity for more teachers with more free time to carry it out.

A large number of administrative problems would be involved in putting into effect such a program. "Administrative difficulties will be encountered in operating any set of specific and prescribed curricula when these curricula are constructed with the educational needs as the central feature to which everything else must be subordinated."[2] School administrators have two important tasks. One is, to fit the work of the school to the facilities provided by governing boards and by legislative bodies. The second is, the preparation of programs of procedure for the guidance of these boards and legislative bodies in the appropriation of funds. To know that certain sorts of work are being done better in other schools than in that for which he is responsible may be but a source of irritation to a normal-school president discharging the first duty under the serious limitations that inadequate resources impose. The same knowledge is the most helpful that the president can have in carrying out his second responsibility. Governing boards need to be informed of better ways of carrying

[1] Bureau of Education Bulletin, 1916, No. 12, p. 18.
[2] Curricula Designed for the Professional Preparation of Teachers for American Public Schools. Carnegie Foundation, 1917.

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on normal-school work. Most of these boards are anxious to make of the school or schools under their care the best professional schools possible. It is not an impossible ideal to set up, that every school shall try to do everything toward the professional preparation of teachers as well as any school of its class does anything that has been found to have value in such professional preparation.

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V.

HOW TRAINING DEPARTMENTS TRY TO TEACH STUDENT TEACHERS TO TEACH.

Every person who has any ability to communicate with other persons has some ability to teach. Small children teach one another. Primitive people teach each rising generation the tribal skills, ideals, beliefs, and modes of conduct. Adults of all levels of culture develop, without specialized training, considerable ability to teach. Shop foremen and stage directors, nurse maids and sales managers, do much teaching without having had special teacher preparation. Any experience through which an individual adds to the skills or knowledge which he possesses adds to his ability as a teacher in the sense that it increases the range of things that it is possible for him, in some fashion, to teach to others. Certain special experiences may add to the ability to impart skills and knowledge to learners.

Any discussion of addition to teaching ability must take into consideration the fact that such additions are never, in the case of normal adults, additions beginning at zero and bringing the ability up to an amount which is equal to the sum of the additions made, but are increments to an already possessed ability to teach, of an amount which may be widely different in two persons, neither of whom has made any conscious effort to acquire teaching skill.

The controversy as to whether it is sufficient for a teacher to know his subject-matter in order to be prepared to teach may be reduced to two questions: (1) Has the person in question, by reason of experiences through which he has passed before undertaking the study of a subject, already developed considerable ability to teach to others what he knows? (2) Will his value as a teacher be more greately increased by giving him acquaintance with more things which he may teach with such skill as he already

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by chance possesses, or by giving him some experiences which will increase his ability to teach what he already knows?

Normal schools attempt to increase teaching ability both by adding to the range of knowledge which the student possesses and by increasing his teaching skill. The departments of the normal school other than the training department have practically entire responsibility for the first of these; they have responsibility for the second in so far as instruction in the ways in which teaching should be done can be made to operate when teaching is actually being done and in so far as ideas can be given and ways of thinking established which will work themselves out in certain desirable teaching acts. The training department is concerned almost wholly with the second attempt. It takes the student with whatever degree of teaching skill he had when he entered the normal school, increased by certain experiences in the normal school, and places him in situations which will bring about such further additions as are possible.

The present section is an analysis of the means whereby the members of the training-school staff attempt to improve the teaching ability of the students who come to the training department as practice teachers. The data have been gathered by inquiry addressed to heads of training departments and to critic teachers. Usable material has been contributed by thirty-seven heads of training departments and by forty-eight critic teachers, representing a total of thirty-nine schools.

Simple exercise of an imperfect skill—mere repetition or practice—does not make perfect. Thorndike says:

"The law of habit is supposed to be that 'practice makes perfect,' or that the nervous system 'grows to the modes in which it is exercised.' But practice without zeal—with equal comfort at success and failure—does not make perfect and the nervous system grows away from the modes in which it is exercised with resulting discomfort."[1]

The training school is organized not merely to give the normal-school student some experience in teaching. It is entirely possible for a teacher to become poorer and poorer as a teacher the more

[1] E. L. Thorndike, Educational Psychology, Vol. III, p. 22.

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he teaches, provided that good teaching gives him no satisfaction or that he lacks ability to discriminate his good from his poor teaching. Or, having this ability to distinguish the excellent from the poor teaching, and being satisfied by the better, improvement might be very slow unless conditions were such that multiple responses were encouraged and the situation so weighted in favor of the more satisfying responses that they would occur sooner than by pure chance.

The situation is supposed to have been so weighted in the case of the normal-school student by the courses in theory of education, by courses in methods, and by the excellence of the teaching which he has himself received in the normal school. His judgment of good in contrast with poor teaching has been developed in some degree by exercise in the discussion of observation lessons. To these students, possessed of some degree of teaching skill, able to judge with some degree of accuracy what teaching is good and what is poor, predisposed in some degree toward doing the correct thing in a teaching situation, more or less familiar with the material of the school curriculum and, supposedly, eager to become good teachers, it is the business of the training school to give the sort of experiences in actual teaching which will do most to add to that teaching ability.

All of the schools furnishing material for this study mention lesson plans as a means whereby they try to help the student teacher to teach successfully. The least elaborate of these involves three heads:

1. What I am going to teach.
2. Why I am going to teach it.
3. How I shall proceed.

Such a lesson plan has the merit of simplicity and involves the answering of one very essential question which is omitted from most other types of plans, namely, why the lesson is to be taught. But a plan requiring a more detailed ordering of method and material is probably a greater help to the student in preparing for the lesson, and, what is equally important, gives a form of lesson outline which is more easily checked by the critic teacher.

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Six schools report that they use Strayer's form for lesson plans. Six others also use two-column plans; outline of subject matter in one column, outline of proposed methods in the second. The following instruction sheets for writing plans, used at Stevens Point, Wisconsin, indicate the nature of these plans in their more elaborate form. The two pages represent the two pages of especially ruled paper upon which the plans are written.

This side for subject matter.

Do not write in this space.	
1.	Grade 2. Subject
4.	Date
6.	Name of Textbook 7. Page
8.	Illustrative material; maps, pictures, specimens.
10.	Preparation. See McMurry's Method of the Recitation Chapter VI. You should write here the outline of material that you plan to call up in the mind of the pupil in order to enable him to understand the new subject you are to present. The outline should be arranged logically.
13.	Subject matter. Here you should write out the subject matter that you are to present. All new material should appear here in logically arranged order, the order in which you are to present it.
15.	Generalization. State the generalization you expect the pupils to reach, in the exact language you will have them use.
17.	Application: State here the material you intend to use.

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This side for method.

Do not write in this space.

3. Name of practice teacher
5. Name of critic teacher
9. Teacher's aim; both general and specific. The general aim should be given on first outline and the specific aim should be given each day.

11. Opposite the outline of Preparation should be written the questions you intend to use in order to call up the known which will assist in understanding the known and unknown. These questions should appear in the same logical manner as in your outline.

12. Pupil's aim. See McMurry's Method of the Recitation for characteristics of pupil's aim; pp. 107-115.

14. Presentation. Here should appear your method of presenting the subject matter outlined on the opposite page. Enough questions should appear here to indicate the kind of questions you intend to ask. As nearly as possible keep the questions on this side opposite the matter on which they are based in your outline.

16. Write the questions you will ask to get the pupils to state the Generalization.

18. Assignment. Write the assignment.

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Accompanying the directions for making plans is a list of suggestions by the principal, Mr. Hyer, from which the following paragraph is taken:

"It should be remembered that the lesson plan is not a 'sacred thing' and no harm will come to the teacher who violates the most carefully made 'lesson plan' in the interests of his pupils. That 'the best laid plans o' mice and men gang aft a-gley' should not be forgotten by the teacher. A well organized lesson plan is evidence that the teacher has thought through the lesson which he intends to present and has planned his method of attack and procedure, but when he comes to present the lesson to his pupils, they become a very vital factor in the matter, and many changes may be demanded in the plan. A wide awake class will present many teaching opportunities that the best teacher cannot foresee, but the fact that one has to change his subject matter or his method does not in the least lessen the value to the teacher of careful thought and planning in preparation of the lesson. A carefully thought out, well organized lesson plan is worthy of the best efforts of any teacher, and will repay in intellectual stimulus and development every honest effort put forth in preparing the plan."

The suggestion that the lesson plan is not a "sacred thing" needs emphasis in training departments. Among the factors which are taken into consideration by one of the schools studied in grading the work of student teachers is "Fidelity to lesson plan." This item might be a proper one, representing a check upon the young teacher's tendency to wander into wasteful digressions, were it balanced by a second item, "Ability to deviate from plan when occasion arises." A difficult element in the practice teaching situation which the critic teacher has to deal with is to require a plan sufficiently detailed to enable the student teacher to know very definitely, before he meets his class, what he intends to do, without allowing the student to be so committed to his plan that he cannot vary from it as conditions warrant.

In the schools studied, plans are submitted for the approval of critic teachers from two days to a week in advance of the teaching of the lesson. In three schools it is reported that, during the advanced stages of practice teaching, plans are not required. One director of training adds, "Unless teaching becomes disjointed, in which case the writing of plans is resumed."

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One school reports the use of plans involving the five formal steps. Two others use a modification of these steps. The following form of lesson plan is fairly representative of those used in many schools.

FORM FOR LESSON PLAN.

Lesson No..... Date.....

Subject of day's work.

I. Aim: (In definite statement not topic form.)
II. Basis assumed: (That which the teacher assumes the pupil must know and does know as a basis for comprehending the new lesson.)
III. Preparation: (Recall of facts, creating atmosphere for particular work; stimulating class by giving incentive for day's work; statement of pupil's aim by teacher or pupils.)
IV. Presentation: 1. Thought steps, in statement forms, logical order, and general summary. 2. Methods or devices; pivotal questions and special devices numbered to correspond with parallel thought steps.
V. Assignment: 1. For class study period. 2. General statement of problems for next teaching lesson.

Since students, when they take regular teaching positions, will probably not write lesson plans it is doubtless wise in the later practice teaching to reduce plan-writing to a very simple statement of what is to be done from day to day. But it will be a very important contribution to the improvement of teaching in schools in general if students can, while in normal schools, be so impressed with the necessity and the helpfulness of writing careful plans that they will, after leaving school, continue to write some sort of plan for every lesson. The simpler the form of plan used in the normal school the greater the possibility of habituating students to such plan-writing as will be continued after graduation.

The characteristic feature of the practice-school effort to improve student teaching is the conference. Every school furnishing information reports at least one regular conference between student teachers and critic teachers each week. Fifteen mention daily conferences and probably in other schools there are consultations for at least a few minutes between student teacher and supervisor before or after the lesson is taught, or both, which are not dignified by the name of conference but which constitute, in the judgment of at least two critics, the time when the most

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effective work in criticism and suggestion is done. The length of these informal daily conferences as reported by sixty-three seniors in the Eastern Illinois State Normal School varies from three to fifty minutes, the median length being eleven minutes.

It did not require a special investigation to bring out the fact that conferences are held between critic teachers and student teachers. The number of hours given to such conferences does not vary significantly in the different schools, and may safely be estimated as being all that the critics can possibly find time for. The interesting item for investigation is what happens in the conferences.

In an attempt to find out what goes on in the conferences the heads of training departments were asked to request critic teachers to state as definitely as possible how they attempt to improve the work of student teachers. Many of the directors of training considered that they were giving satisfactory information when they reported the number of conferences that critics had with student teachers but detailed replies have been received from forty-eight critic teachers. The following is a summary of the methods used in trying to modify and improve the work of students:

1. When the student is assigned to a class he observes the teaching of the critic for some days, writes plans as if he were to teach the lesson each day, and after each lesson, discusses his plan and the plan used by the critic.

2. When the student begins teaching, in a conference before the lesson is taught suggestions are made as to desirable changes in the plan. Additional material and alternative methods are suggested. The student teacher is reminded of the weaknesses of the pupils as shown in the work of the preceding recitation and of the necessity for strengthening these points before proceeding. Faults in the teaching of the preceding lesson are brought to the attention of the student by means of a written critique of that lesson or by verbal criticism. Commendation of some bit of work well done in the preceding lesson sends the student into the classroom with a desirable feeling of confidence and serves to fix that particu-

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lar procedure in his memory as an example of good teaching. The conferences where this work is done are of two sorts; the formal weekly conference when the work of the preceding week is reviewed and plans for the coming week are discussed; and the informal, unscheduled, sometimes hurried conferences immediately preceding or following a particular lesson.

3. The critic teachers are unanimous in reporting that the method used as far as possible in making the student conscious of the defects in his teaching is to stimulate him to self-criticism. If the student can be made to be dissatisfied with poor teaching on his own part because it is poor teaching and not because the supervising teacher has criticised it, if he develops the ability to know when his teaching has been poor, the student, according to the theory of most critics, will make improvement. Three critics say that students criticise more freely the teaching done when the critic is out of the room than that done with the critic present, due to the fact that after a lesson so taught they know that they are to make a report of the success of the lesson and are consciously placed in the position of being their own critics. Within such limits as the welfare of the pupils will allow, and with student teachers of proved ability and honesty, this method is worth at least occasional use.

4. As a valuable supplement to self-criticism, criticism by fellow students is mentioned by four training-school teachers. The following quotation from the statement made by Miss Gilberta Coffman, fifth-grade critic teacher at Charleston, Illinois, describes the plan:

"The best results are obtained, usually, from group work. Several student teachers are assigned to the same subject. One of the group teaches for the others to observe. Then, in the conference, the students take the leading part in the discussion. Just as pupils care most for the opinion of their classmates, so student teachers are more keenly alive to estimates—approval and disapproval—made by fellow students."

5. In the general weekly conference at which the critic teacher meets with all of her group of student teachers the fol-

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lowing things are mentioned by one or more critic teachers as being done:

a) Methods of teaching are discussed.

b) Faults of teachers are discussed without personal mention being made of any student who is guilty of the fault in question but with direct bearing on work done during the preceding week.

c) Certain excellencies of teaching are discussed and illustrated, when possible, by mention of a piece of work done by a member of the group.

d) Reports are made by students on reading done in the field of education; new assignments for reading are made; bibliographies of available material in the different fields in which the students are working are given and are added to by the students themselves.

e) Occasionally the conference hour is devoted to the teaching of a lesson by the critic and its discussion by the group. This is done more often as an addition to the conference hour than as a substitute for it.

f) Problems of the school and of particular pupils are discussed for the purpose of making student teachers feel that the important thing in the school is the progress of the pupils rather than their own progress.

6. Criticism of the students' teaching is based as far as possible upon the effect which it has upon the children taught. Miss McClesky, critic of the second and third grades in the West Texas State Normal College writes: "I try to keep clearly before the student teacher that it is the pupil and not herself who is the important factor. My suggestions are made largely through questions."

7. The student teacher is helped to improve his work during the class period while he is teaching. An upper-grade critic in the normal school at Platteville, Wisconsin, suggests that a critic teacher may often set right a class exercise that is going wrong in the hands of a student teacher by asking a single question of the pupils; that she may relieve some difficult situations, showing how

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such situations are to be handled, by a simple suggestion to the teacher or to pupils. This helpfulness on the part of the critic during the progress of the recitation is outlined by Miss Edith Regan, eighth-grade critic at the Eastern Illinois State Normal School:

"There is occasional participation by the teacher with the pupils in the recitation being conducted by a student. This is designed to create a desired atmosphere which the student may be unable to establish because of undue timidity. The critic enters into the recitation with suggestions and even directions which the teacher needs at the moment to brace him. Pupils of the class are not led to recognize the interruption as a guidance, however. My motive is explained later to the student in conference. The student has a definite illustration of some lesson difficulty and its solution. This method is used infrequently."

7. The critic teachers often teach for the student teachers whenever they feel that they can show more clearly than by other methods of supervision, how a certain thing should be done. Principal F. S. Hyer of the training school at the Wisconsin State Normal School at Stevens Point says:

"If we think it will be most helpful to the student teacher, we take the class for her for two or three days and permit her to observe. I have always insisted that the practice teacher has the right to say in answer to criticism. 'Let me see you do it'."

8. Student teachers are kept continuously informed as to the strong and weak points in their work and of their progress in improving their teaching. Charts and score cards, which will be discussed in detail in the next section, are used to give this information. Such a score card, designed to give a graphic record of teaching ability, used in the West Texas State Normal College, is reproduced below. Dr. Garth reports that students are eager to see these charts each week and that they make particular effort to correct the weaknesses as shown by the chart. It represents an ingenious and useful means of making operative the Law of Effect in modifying bonds which have to do with the very complicated business of teaching.

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FOR RATING STUDENT TEACHERS.

..... Class.....
Student Teacher.
..... Date.....
Subject.

A	B	C	D	E	F	
....	....	....	....	....	....	Voice .....
....	....	....	....	....	....	Health .....
....	....	....	....	....	....	General appearance.....
....	....	....	....	....	....	Intelligence .....
....	....	....	....	....	....	Self-reliance .....
....	....	....	....	....	....	Adaptability .....
....	....	....	....	....	....	Accuracy .....
....	....	....	....	....	....	Sincerity .....
....	....	....	....	....	....	Promptness .....
....	....	....	....	....	....	Teaching skill.....
....	....	....	....	....	....	Control .....
....	....	....	....	....	....	Attention of class.....
....	....	....	....	....	....	Following suggestions.....
....	....	....	....	....	....	Accord with pupils.....
....	....	....	....	....	....	Preparation .....
....	....	....	....	....	....	Lesson plans.....
....	....	....	....	....	....	Community interest.....
....	....	....	....	....	....	Coöperation .....
						Average

Best Poorest

TO THE CRITIC TEACHER: .....
One report on each student teacher should be handed in every week to the Director of the Elementary School. Name of Observer.

There has been relatively little exchange of ideas on methods of supervision of teachers among persons engaged in supervision in the United States. Certain persons qualified to judge believe that nothing is less well done in American public-schools than is the supervision. If any persons in the country do know how to be helpful to young teachers it is the critic teachers in the normal schools. If all that they know, collectively, could be got together it would make a treatise of inestimable value on how to deal with teachers in such a way that their teaching would be improved. Some agency for mobilizing this knowledge of the technique of supervision should be set in motion. Probably no collection of data would give larger returns in making available valuable suggestions for the improvement of instruction in our public schools.

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VI.

THE GUIDING PURPOSES OF TRAINING DEPARTMENTS.

A normal-school organization must have as a guiding purpose in the experiences to which it exposes its students, very definite ideas of what it is proposed to do for those students. A general purpose, unanalyzed into more immediate aims, has little value for guidance, particularly when the general purpose is the preparation of so complex a product as a "good teacher."

The definition of aims of education on all levels is an essential step in making the educative process effective. The general, summarizing aim of the whole process must be and is being differentiated into particular aims toward whose accomplishment particular school experiences are directed.

The purpose of this section is to discover what the aims are which the training departments of normal schools are designed to accomplish; what the purposes are which guide their organization and their work.

Two methods have been employed to discover what the purposes of training departments are. First, statements made in catalogs and bulletins have been examined. As is to be expected, the aims stated are of a very general sort. A single quotation will give an adequate notion of the character of these statements. The quotation is taken from the Normal School Quarterly of the Western Illinois State Normal School, March, 1914, page 6.

"In the development of the normal school, the Training School serves a threefold purpose, namely:

"1. An opportunity for training students who have sufficient foundation in the practical work of the schoolroom, giving them practice in the solution of the daily problems of teaching and management, under the supervision of expert training teachers in co-

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öperation with teachers expert in subject matter and the pedagogy of the special subjects.

"2. In this department are tested the validity and efficiency of methods and conclusions developed in other departments of the Normal School. The department serves, therefore, as a testing laboratory for the products of the institution and assures a line of work designed to meet practical and practicable needs.

"3. The Normal School stands for advanced thought in education. The Training School serves as a kind of educational experiment station for investigation and research, where advanced thought may take concrete form and where both children and student teachers may derive the benefits of all improvements and advances in school work.

"While existing solely as a functional part of the Normal School in realizing the preparation and training of teachers for the public schools, the most fundamental factor in determining the character of the Training School is to make it a school typical of the school needs of its environment."

An attempt was made to find to what extent training schools are meeting the purpose of serving as research laboratories by asking presidents of normal schools and directors of training schools the question: "What experiments have been carried out in your training school and where are the results published?" Of the fifty-four replies received to some or all of the questions asked, thirty-six included replies to this question, of which ten were "none"; eight training school directors enclosed reprints of articles published; the remaining eighteen replies were to the effect that, while the training school was used constantly in experimenting in methods of teaching and classroom management, none of the results had been of sufficient consequence to warrant publication. Of the eight articles submitted as evidence of experimentation only one showed that data had been obtained by the use of the training school for laboratory purposes.

Evidently, then, it is not so fundamental a purpose of the training school to serve as a research laboratory as to serve as a laboratory in which the student verifies his educational theory as he verifies his principles in physics and chemistry in the science laboratories. The training school as a laboratory is a teaching and testing laboratory rather than a research laboratory. Its success

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in accomplishing its purpose as a teaching laboratory must be estimated by determining the vocational efficiency of the student-teacher, which is also the test for the success of the training department in accomplishing the first of the three aims.

The second investigation of the aims of training departments was made by gathering detailed statements as to the qualities which these departments look for in their product,—the qualities of teaching merit which are considered in grading student teachers. This represents a fair basis for judging what the aims of the training departments are. In spite of the difficulty of analyzing the qualifications of a good teacher and the greater difficulty of selecting those characteristics which can be developed by education and training, and in spite of the necessity for holding such an analysis subject to frequent change, a normal school, and in particular the training department, must have a very definite program of the particular aims, in terms of items of teaching merit, which are to be accomplished during the time that the student attends the normal school. This program must serve both as a guide to immediate procedure and as a standard by which to judge the success of the procedure.

The persons in the normal school who are probably most keenly alive to the qualities which are essential in a good teacher are the director of the training school and the critic teachers. It is their task to take students, with whatever teaching skill they may have when they come to the training school, with such equipment of technical knowledge and of personal traits as make the development of farther skill possible, and to increase that teaching skill by putting the students into situations that will stimulate and foster real growth.

Data for the study have been collected both from directors of training departments and from critic teachers. Definite statements have been received from persons in twenty-three schools as to the qualities which are taken into consideration in grading the work of student teachers. From eighteen of these twenty-three schools score cards or report blanks have been received, which are used in reporting grades and progress.

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The number of items used in these analyses of teaching ability varies from seven to forty-nine. Three include figures indicating the weight attached to each item. The number of items included probably does not indicate an attempt at a total analysis of teaching ability on the part of the school using any one of the lists, but probably represents a compromise between such a complete list and a list sufficiently brief to be easily usable. Such a compromise is very difficult to make. A. C. Boyce, in the study published in the Fourteenth Yearbook of the National Society for the Study of Education, Part II, says:

"In response to the demand for brevity the list may be made very short, in which case in order to cover the ground, the terms have to be very general. The value of the terms in analyzing the teacher and her work becomes less as the terms become more general and more inclusive. The need is for terms which are definite and precise."[1]

In the list which Boyce produced as the result of his study are included forty-five items classified under five general heads, two of the forty-five items having to do with the teacher's relation to the community and being therefore not easily applicable to the grading of teachers in training.

Elliott's score card "A Provisional Plan for Measuring the Merit of Teachers" includes fifty-two specific items, three of which, having to do with community relationships, would not be applicable to teachers in training.

The score card issued by the New York Bureau of Municipal Research for the use of supervisors and surveyors of schools includes ninety-three items.

A score card proposed by F. C. Landsittel, of Ohio State University includes five main headings, called major traits, with twenty-nine subheads, called minor traits among which are distributed 1,000 points indicating the weight attached to each.[2] Sprague's "Score card for rating student teachers in training and practice" has sixteen items arranged under four general headings. The list, with the weight attached to each item is as follows:[3]

[1] Fourteenth Yearbook of the National Society for the Study of Education, Part 2, p. 17.
[2] Educational Administration and Supervision, June, 1918, p. 304.
[3] Pedagogical Seminary, March, 1917, p. 78.

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I. PREPARATION 200
1. Lesson plans..... 95
2. Daily or weekly plans..... 50
3. Use of course of study..... 55

II. TEACHING SKILL.....360
1. Stimulation of interest..... 90
2. Thought and response..... 85
3. Drill 55
4. Economy of time..... 55
5. Results 75

III. CLASSROOM MANAGEMENT.....230
1. Organization of class..... 60
2. Care of room..... 45
3. Discipline 90
4. Clerical work..... 35

IV. PERSONAL FITNESS.....210
1. Physical 60
2. Progressive 50
3. Manners and morals..... 45
4. Social fitness..... 55

Sprague lists six reasons for the use of such a score card in the training school:

"1. An analysis is presented of the qualities necessary for successful teaching and of the relation of these qualities to one another.
2. In the hands of student teachers this analysis will tend to promote self criticism and self improvement.
3. In the hands of critic teachers this analysis will tend to promote their comprehensiveness of judgment in rating students' teaching efficiency.
4. This outline may be used by critic teachers as a score card for rating student teachers in such a manner as to give a reasonable proportion of credit to each of the fundamental qualities.
5. These ratings should designate points of strength and weakness in the student's teaching and should therefore prove valuable in guiding the principal, the supervisors and the critic teachers in their constructive work with the student teacher.
6. The records on the score card may be used as a basis for recommending graduates for appointments."[1]

To this summary of advantages arising from the use of such a score card should certainly be added the fact that it serves to define the purposes of the normal school as a whole and as a means

[1] Ibid, p. 72.

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of checking up the success of the curriculum and of the teaching in the school as a whole in accomplishing their purposes.

The least elaborate score card received from the eighteen schools furnishing data for this study contain the following items:

Preparation
Presentation
Questioning
Assignment
Lesson plans
Initiative
Discipline

The card calls for rating in four degrees of excellence for each item: F=Fair; I=Improving; S=Strong; W=Weak; and contains a ruled space in which percentile total grades are to be recorded each week for ten weeks and a graph of teaching progress made. This is the card used at Stevens Point, Wisconsin. A score card used at Canyon, Texas, providing for rating in eighteen items and the graphing of the score is reproduced on Page 90.

The card containing the largest number of items is that used at Macomb, Illinois, reproduced below. "Average power" is not marked; superior is marked x or xx; inferior, — or — —.

NATIVE POWER:

Health and energy	Responsibility
Voice and enunciation	Adaptability
Neatness in work and dress	Willingness
Knowledge	Coöperation
Use of English	Enthusiasm
Manner and poise	Force
Confidence	Persistence
Attitude toward criticism	

MANAGING POWER:

Routine management	Decision
Leadership	Consistency
Influence	Tact
Attitude toward children	Self-control
Discipline	

LOGICAL POWER:

Amount of preparation	Originality
Clearness of aim	Thoroughness
Organization of subject matter	Appreciation of relative values
Mechanics of plan making	Ability to judge recitation

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TEACHING POWER:

- Attention and interest
- Right motives
- Method of presentation
- Care of child's English
- Appreciation of child's difficulties
- Use of child's experience
- Reaching individual
- Securing and fixing results
- Guiding the child's thoughts
- Assignment

POWER OF ACCOMPLISHMENT:

- In terms of course of study
- Children's motives
- Habits
- Social efficiency
- In terms of recitation
- Self activity
- Abiding interests

The following total list of one hundred one items is made up of all the qualities mentioned by the twenty-three schools reporting; (eighteen printed or mimeographed score cards; five lists furnished by presidents or by directors of training). Where items differently named clearly referred to the same quality of teaching merit only one name has been used. The figures after each item indicate the number of schools reporting that item as one which is considered in grading the student teacher. The classification used is that of Boyce's list already referred to and involves some rearrangement of items appearing on score cards which classify the items. The totals for the headings are the totals of all schools mentioning any item among those headings and of those using the heading or its equivalent as one item without analysis. In combining items under a single designation when they seemed to mean the same thing, error has been made on the side of including in the list terms which overlap rather than in combining items which may possibly mean different qualities. This for the reason that the purpose in making the list is to show in detail all the qualities which are considered in estimating teaching merit. If the list were to be made the basis for a new score card, effort would have to be expended to effect some combination of overlapping items. But in making such a score card the easy use of the card would be hampered by the detail of the analysis rather than its effectiveness reduced by failure to make so complete an analysis as is possible of all distinguishably different qualities which contribute to teaching efficiency. Some of the items included are of but doubtful value

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because they represent qualities which could not be properly evaluated by any known means; for example, "good judgment" as a general trait. Some could well be regrouped under larger headings, as knowledge of spelling, of arithmetic and vocabulary under scholarship.

I. PERSONAL EQUIPMENT—23.

Health	10	Neatness in dress and personal appearance	12
Energy, vigor	7	Facial expression	2
Voice	11	Open-mindedness	3
Enunciation	2	Promptness	4
Manner, courteous, pleasing, dignified	8	Resourcefulness	2
Poise, bearing	7	Naturalness	2
Confidence	5	Sincerity	2
Attitude toward criticism, ability to profit by it	8	Sympathy	5
Responsibility, dependability	8	Practical	1
Adaptability	3	Personal habits	1
Willingness	1	Leadership	2
Coöperation	4	Patience	2
Enthusiasm, animation	7	Courage	2
Persistence, staying power	2	Not fault-finding	1
Tact	7	Optimism, cheerfulness	3
Self-control	3	Loyalty	1
Initiative	3	Industry	2
		Attitude toward superiors and colleagues	3

II. SOCIAL AND PROFESSIONAL EQUIPMENT—20.

Knowledge, scholarship	14	Mastery of methods	1
Use of English	9	Ability to supervise play	1
Professional interest, attitude, spirit	9	Quick thinking	1
Ability to follow directions	2	Good judgment	1
Intelligence	2	Informed as to good methods	1
Insight into school problems	2	Culture, refinement	3
Moral worth and influence	5	Pleasure in work	3
Capacity for growth	6	Handwriting	2
Thoroughness	3	Silent reading	1
Accuracy	2	Arithmetic	1
Ability to judge recitation	1	Vocabulary	1
Community interest	2	Interest in pupils' out of school activities	1
Appreciation of child nature	2	Social disposition	1

III. SCHOOL MANAGEMENT—23.

Discipline	17	Economy of time	1
Attitude toward children	5	Decision	1
Management of materials	4	Firmness	1
Care for conditions of room	3	Consistency	1
Attention to posture of children	1	Producing good spirit in school when in charge	1
Routine	1		

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IV. TECHNIQUE OF TEACHING—23.

Clearness of aim	5	Appreciation of child's difficulties	1
Originality	5	Use of child's experiences	2
Organization of subject matter	6	Care of child's English	2
Arousing interest and attention	9	Right motives	1
Reaching individual pupil	5	Good drill	2
Mechanic of plan making	9	Fidelity to plan	1
Assignment	6	Skilful methods of presentation	8
Skill in questioning	8	Appreciation of relative values	3
Skill in illustrating	2	Stimulating appreciation	1
Daily preparation	8	Teaches how to study	2
		Guidance of child's thought	1

V. RESULTS—8.

In terms of course of study	1	In terms of recitation	2
Children's notives	1	Self-activity of children	1
Habits of children	1	Abiding interests	1
List of sixteen results from project teaching			1

The outstanding fact brought out by this list is the wide diversity of factors which are taken into consideration in grading the work of student teachers. In one school but one factor under personal equipment, that of initiative, is considered. In another, eight out of eighteen qualities considered belong under the heading of personal equipment.

A second fact is the lack of analysis of certain factors. In seven cases teaching skill is on the list of items upon which the teacher is to be graded but is completely unanalyzed. Personality is listed in nine cases with no analysis. Results are unanalyzed in six of the eight cases where they are mentioned at all.

The small consideration given to results is surprising. The final criterion of good teaching must be the results which it produces. When school systems are surveyed, quality of teaching in the system concerned is measured practically entirely by the results as revealed by standard tests given to pupils. If a complete analysis of the results which teaching may be expected to produce could be made, and the amount of those results in the children under a teachers care measured and compared with the amount of progress which they are capable of making, no other measure of teaching ability would be needed.

In the case of the survey of a large school system, the number of pupils tested is so large that normal distribution of pupil ability may be assumed and results of tests given in the system compared

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directly with standard scores. In the case of the practice teacher, the group dealt with is so small, the time that the group is under the care of the practice teacher is so short, that complete dependence cannot be placed upon results as a measure of teaching efficiency. But certainly more consideration should be given to results than the returns from these twenty-three schools indicate is being given, both as a means of estimating the ability of the teacher in the most objective fashion possible and as a means of directing the attention of the student teacher to the importance of results as a criterion for estimating teaching success.

The results considered need to be carefully analysed. Results in terms of the accomplishment of the aim of the particular recitation can be judged by a competent observer with some degree of accuracy, in the absence of any objective test for measurement, by questioning children and by listening to their summaries of the facts of the lesson. The results of a series of lessons may be estimated by the use of standard tests, so far as results in "Primary learning" are concerned, in a number of elementary and high school subjects. The results in terms of "Accessory and concomitant learning," which are of at least equal importance, are less easy to determine. Just what is meant by these three terms will appear from the following quotation form Professor Kilpatrick's description[1] of the project method:

"Suppose as extreme cases two boys making kites, the one with whole heartedness of purpose * * * the other under direst compulsion as a most unwelcome task. For simplicity's sake suppose the latter under enforced directions makes a kite identical with the other. Call the identical movements in the two cases the "primary" responses in kite making. These furnish the kind of responses that we can and customarily do assign as tasks—the external, irreducible minimum for the matter at hand. Upon such we can feasibly insist, even to the point of punishment if we so decide. Follow now the thinking of the two boys as they make their kites. Besides the thinking necessarily involved in the primary responses, other thoughts, few or many, will come; some perhaps of materials or processes involved, penumbrae as it were of the primary responses; others more personal, or by way of comment upon the process. The penumbrae of the primary we may

[1] Teachers College Record, Sept., 1918, pp. 326-7.

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call the 'accessory' or complementary responses; the others, the concomitant' or byproducts of the activity."

It is difficult to determine in what degree the learning of children under the instruction of a given teacher "sprouts suggestions" for further interesting things to be learned and so leads to further unurged learning; in what degree it leads to better attitudes toward school and teachers, toward learning and proper ways of doing things. But the difficulty is no excuse for not trying to determine whether these things happen and for not attempting to produce teachers under whose care children will make progress not alone in the primary learning of the subject-matter of the curriculum, but also in this accessory and concomitant learning which, as Professor Kilpatrick points out, come as a result of the method used in attacking the primary problem. It is important that children learn to purpose and to plan for the carrying out of their purposes, and teachers who have ability so to teach that children learn these things, have a quality of teaching merit which should be emphasized in teacher-preparation and recognized in making up teaching grades.

The only school among the twenty-three which takes detailed account of these less easily measurable results of teaching is the Kansas State Normal School at Emporia. There seven different score cards are used for as many different sorts of activities which are carried on under the direction of student teachers. One of these is an "Observation and score card for project-problem instruction" on which sixteen points are listed as follows:

1. Ability of pupils to work as a social group.
2. Ability of pupils in planning and outlining projects.
3. Ability of pupils in raising and stating problems.
4. Ability of pupils to distribute the work of the project among themselves, which is to be done in the following study period.
5. Ability of individual pupils to make reports to the class which they have previously worked out in the study period.
6. Degree of attention and skill of the class in taking notes on the report being given by a pupil.
7. Ability of the class to carry on fruitful discussion and ask questions about matters not clear to them.

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8. Ability of the class in giving criticism intended to help the pupil reporting.
9. Ability of the class in summarizing and drawing conclusions when all reports of problems or points related to the class project by individual pupils have been given.
10. Ability of pupils in discovering their own needs for skill or knowledge of certain technique required to work out the project or to solve the problem.
11. Ability of pupils in planning and in conducting drills or work in acquiring knowledge of technique.
12. Ability of individual pupils in being thoughtfully active throughout the recitation.
13. Ability of pupils to respect leadership in the members of their class.
14. Degree of good leadership developed in the recitation.
15. Ability of pupils to co-operate freely, helpfully, orderly.
16. Ability of pupils to criticize each other's work sympathetically, and to receive criticism in the right spirit.

Five of these factors appear in the lists reported by other schools. The other six score cards used at Emporia are:

Observation and score card for general conditions of instruction. Fifteen items.

Observation and score card for teacher activities in the recitation period. Ten items.

Observation and score card for pupil activities in the supervised study period. Eleven items.

Observation and score card for teacher activities in the supervised study period. Eight items.

Observation and score card for drill projects. Twenty-two items.

Observation and score card for appreciation activities. Nine items.

The critic teachers at Emporia are evidently expected to look for all of these ninety-one items and to evaluate them in estimating the success of the teacher. But when they report on the teacher to the head of the training department, they do so on a blank which calls for grading the student on twenty-six points, of which "results" is not one and among which "personality" appears but is unanalyzed, while the "teaching factor" is analyzed into but five items. If it be true in any large degree that critic teachers are expected to take notice of and give weight to many more items in forming their estimates of students' teaching merit than appear on the score sheets of the training departments, then the list which is

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given later in this section, based upon the reports of critic teachers as to the factors which they take into consideration in grading the students' work in practice teaching should be a more valid list than is the list made up from the score cards furnished by training departments.

Another surprising omission from this list is the factor of ability in self criticism. The nearest approach to such an item is "ability to judge recitation" which is reported by one school. In view of the fact that critic teachers report that they try to improve the student teacher's work very largely by stimulating self criticism, and in as much as one of the very important ends to be accomplished in the professional preparation of teachers is to make it possible for teachers to improve in service after leaving the normal school, it is clear that considerable weight should be attached to this item in estimating the fitness of students to undertake independent teaching.

Lack of ability in self criticism on the part of teachers contributes to the situation pointed out in section three as arising in part from single hour, small group practice teaching, namely, the necessity for close supervision of teaching. More attention in normal schools to the development of this ability in self criticism should help both to solve the problem of reducing the burden of supervision, and to extend the time during which teachers in service continue to improve their work independently of supervision.

A factor which might well be more widely emphasized is that of economy of time in school management, mentioned in the report from one school only. President L. C. Lord of the Eastern Illinois State Normal School impresses upon his colleagues and upon students that no single thing reduces the effectiveness of a schoolroom on the side of school management more than to have things done in thirty seconds which should be done in ten; that promptness of movement from seats to blackboard, in passing papers and supplies, in responding to signals in general create a schoolroom situation which adds to the effectiveness of all work undertaken, and that while a teacher may conceivably secure these outward

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signs of efficiency without securing real efficiency, the correlation is, in his observation, in general high. One reason for the presence of so large a number of laggards in our public schools may very well be the laggardly, leisurely, unbusinesslike way in which work is carried out that should be done in prompt, alert, businesslike fashion.

If the frequency of occurrence be a criterion, ability to discipline is the most emphasized characteristic of a teacher among the qualities considered in normal schools, being reported from seventeen of the twenty-three schools as among the factors given weight in judging teaching merit. It is somewhat disheartening to find that the factor most generally cared for, as indicated by the facts collected, is precisely the one in which superintendents find normal-school graduates deficient. That it needs especial attention is shown by studies made of causes of failure among teachers. Such a study of causes of failure among high-school teachers, made by Miss Cleda Moses,[1] based upon data collected from school superintendents, mentions "Weakness of Discipline" as fourth in order of importance, outranked by "Poor instruction," "Weakness of personality," and "Lack of interest." In the report of a study of causes of failure among elementary-school teachers Littler names "Poor discipline" as the most important of ten causes of failure, judged from the frequency with which it was mentioned by superintendents from which data were collected.[2] Ruediger and Strayer found the highest correlations between general teaching merit and particular teacher characteristics to be between general teaching merit and instructional skill, correlation +.56 and between general teaching merit and discipline, +.54.[3] The failure to make of normal-school graduates good disciplinarians is evidently not due to lack of realization by normal-school supervisors of the importance of ability to control schoolroom situations. A contributory cause for the failure if not the prime cause is to be found in lack of experience which is given the students in the course of practice teaching in dealing with situations where dis-

[1] Why High School Teachers Fail, *School and Home Education*, Jan., 1914, p. 167.
[2] School and Home Education, March, 1914, p. 205.
[3] Journal of Educational Psychology, May, 1910.

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cipline is a problem. Only extended practice periods under average schoolroom conditions can afford such experience.

The factor of "native intelligence" should be more widely included in estimating teaching merit in training departments. This is a very inclusive term, but such devices as the Trabue completion tests and the Binet scale have demonstrated their value in estimating the degree in which intelligence, unanalyzed very largely, is present in an individual. Normal schools could well make use of a variety of such tests in determining the promise which each graduating student gives of making a success as a teacher, as universities are beginning to make use of them in connection with entrance examinations and as the Army made use of them in classifying men as to probable fitness for different types of work. A fruitful field for investigation is that of devising tests that will aid in selecting persons of the special mental equipment which fits them to become teachers. Such tests would be of value not only in grading students at graduation but also in selecting students for admission to normal schools.

The following is a reduced list taken from the total list on Page 98. In this list are included only items mentioned by five or more persons furnishing information. The number of times each is mentioned is indicated. The classification of the list on Page 98 is retained:

I. PERSONAL EQUIPMENT.

1.	Neatness in dress and personal appearance	12
2.	Health	10
3.	Voice	11
4.	Attitude toward criticism and ability to profit by it	8
5.	Responsibility, dependability	8
6.	Manner: courteous, pleasing, dignified	8
7.	Energy, vigor	7
8.	Poise, bearing	8
9.	Enthusiasm, animation	7
10.	Confidence	5
11.	Tact	7
12.	Sympathy	5

II. SOCIAL AND PROFESSIONAL EQUIPMENT.

1.	Knowledge, scholarship	14
2.	Use of English	9
3.	Professional attitude, interest, spirit	9
4.	Capacity for growth	6
5.	Moral worth and influence	5

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III. SCHOOL MANAGEMENT.
1. Discipline 14
2. Attitude toward children..... 5

IV. TECHNIQUE OF TEACHING.
1. Mechanics of plan making..... 9
2. Skilful method of presentation..... 8
3. Arousing interest and holding attention..... 9
4. Skill in questioning..... 8
5. Daily preparation..... 8
6. Good assignments..... 6
7. Organization of subject matter..... 6
8. Clearness of aim..... 5
9. Reaching individual child..... 5
10. Originality 5

V. RESULTS (Unanalyzed)..... 8

A second attempt to find what the qualities are which are considered in grading the work of student teachers was made by applying to the persons who actually assign the grades, namely, the critic teachers. The application was made through the director of training, who in the greater number of cases, assumed that he was given the desired information when he sent a score card which is used in recording the final teaching grade. The case of Emporia, already cited, indicates the degree in which the lists observed and scored may vary. The returns from other schools indicate similar differences.

Critic teachers were asked to name in the order of their importance the factors which they take into consideration in making up students' teaching grades. Returns were received from 43 critic teachers in 8 schools. The states represented are: California, Illinois, Massachusetts, Nebraska, Pennsylvania, Texas, Washington, and Wisconsin.

The lists returned were of such varying degrees of detail and so many of the teachers sending lists said that they were unable to list the qualities in the order of their importance that no direct quantitative treatment of the results of the returns is possible. The qualities mentioned are listed and classified in the following table. Items six and seven under VI were added at the suggestion of a critic teacher who examined the list. The list was then submitted to eighteen persons, critic teachers either in active service

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or undertaking advance study at Teachers College and intending to return to critic work. They were asked to distribute 1000 points among the items in proportion to their relative importance. The figure in the first column after each item indicates the number of times each occurs in the returns from the original teachers from whose statements the total list was made up. The second column shows the median number of points assigned to each of the seven main divisions and to each particular item by the persons making the distribution. The totals for the medians of the individual items do not give the total for the division since it is the median of the totals assigned in the eighteen distributions. The third column represents these median figures re-translated into terms of 1000 points; that is, the figures assigned to the seven main headings in the third column bear the same ratio to 1000 that the figures assigned in the second column bear to the sum of the seven figures, and the figures for the particular items in the third column bear the same relation to the total points assigned to the group to which each belongs as the corresponding figure in the second column bears to the total of the median numbers of points assigned to all items in the group. All figures are adjusted to the nearest number divisible by five.

As in making the list from the training-school score cards, the effort has been to include all items that might mean a different quality rather than to combine all that might possibly mean the same quality, since the purpose is not to make a score card but to determine the qualities which critic teachers actually do take into consideration in grading student teachers, with such index of the weight attached to each item as it is possible to obtain. This increased the difficulty of distributing points, and the persons making the distribution were asked to assign no separate weight to an item which they believed to be included under some other, but to indicate what the duplication was believed to be.

In the case of an item which has been omitted by four or more persons making the distribution for the reason that it was considered by all of the four to be included under some one other item, the points assigned to both items in all of the other distributions

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have been included under the more inclusive of the two. The table indicates what items have been so combined with others.

Factors considered by critic teachers in grading the work of student teachers with an index of the weight assigned to each.

		I.	II.	III.
I.	ATTITUDE TOWARD WORK		135	145
	1. Enjoyment of work	2	10	15
	2. Attention to details	3	10	15
	3. Quick to carry out suggestions	2	10	15
	4. Promptness	2	5	5
	5. Careful daily preparation	13	15	20
	6. Readiness to coöperate	5	10	15
	7. Attitude toward profession	25	25	30
	8. Readiness to profit by criticism	6	Included under 9	
	9. Ability and anxiety to improve	6	25	30
II.	ATTITUDE TOWARD PUPILS		60	65
	1. Personal interest in pupils	7	30	30
	2. Interest in pupils' activity outside of school	2	Included under 1	
	3. Ability to get pupils' point of view	4	20	20
	4. Ability to secure coöperation of pupils	5	15	15
III.	SCHOLARSHIP		150	160
	1. Knowledge of subject matter	12	30	35
	2. Breadth of general information	3	20	25
	3. Accuracy of information	4	10	10
	4. Grasp of educational problems	1	10	10
	5. Careful and correct English	6	15	15
	6. Ability to judge good teaching	1	15	15
	7. Ability to plan and organize work	8	20	25
	8. Ability in self-criticism	3	20	25
IV.	CLASS MANAGEMENT		75	80
	1. Ability to control pupils	10	35	40
	2. Economy of time	2	15	20
	3. Firmness	4	Included under 1	
	4. Fairness	3	Included under 1	
	5. Care for physical condition of room	1	15	20
V.	SKILL IN CONDUCTING THE RECITATION		180	195
	1. Good questions, stimulating thought	6	20	25
	2. Adaptation of material to needs of class	3	35	40
	3. Use of children's experiences	2	Included under 2	
	4. Use of illustrative material	2	15	15
	5. Definite, workable assignments	3	20	25
	6. Ability to get definite summaries from pupils	1	15	15
	7. Arousing interest and holding attention	6	15	15

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		I.	II.	III.
8.	Definiteness of aim	1	15	15
9.	Ability to clinch important points	2	15	15
10.	Keeps teacher activity in background	3	25	30
11.	Resourcefulness	5	Included under 2	
VI.	RESULTS		180	195
	(Unanalyzed)	7		
1.	Increase in pupils' knowledge	2	40	45
2.	Increase of pupils' resourcefulness	1	Included under 3	
3.	Increase in pupils' self-reliance and self-direction	2	35	40
4.	Increase in pupils' ability to attend	1	15	15
5.	Increase in pupils' self control	1	15	15
6.	Increase in pupils' power of expression		35	40
7.	Increase in pupils' interest in learning		35	40
VII.	PERSONAL TRAITS		150	160
1.	Alertness	1	Included under I, 2	
2.	Adaptability	4	5	5
3.	Cleanliness	1	Included under 12	
4.	Courage	2	Included under 6	
5.	Enthusiasm	2	Included under I, 1	
6.	Decision	1	10	10
7.	Expressive countenance	1	Too indefinite	
8.	Industry	5	15	20
9.	Initiative	6	10	10
10.	Loyalty	2	Included under I, 7	
11.	Manner	8	Included under 14	
12.	Neatness in dress and personal appearance	13	10	10
13.	Intelligence	2	15	20
14.	Poise and carriage	5	5	5
15.	Presence commanding attention	1	Included under 14	
16.	Reliability, dependability	8	10	10
17.	Sense of order	1	12	15
18.	Sincerity	3	5	5
19.	Sympathy, gentleness of spirit	9	15	20
20.	Tactfulness	7	10	10
21.	Vivacity	1	Included under 22	
22.	Vigor	4	10	10
23.	Voice, pleasing, distinct enunciation	11	10	10

In the request for data from critic teachers they were asked, in case they used the term "personality" to give an analysis of the factors which make up personality. All included a list of personal characteristics of the sort which make up the total list included under "Personal traits", plus some others such as "moral worth," 'such things as help to distinguish one person from an-

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other", "sum of mental characteristics", "spirituality, not necessarily religious."

Comments were added in certain cases which indicate that the enumeration of personal traits was felt to be inadequate to describe personality. One critic teacher says: "I mean that quality * * * which causes an 'atmosphere' about the teacher which 'radiates' and makes her students feel that she has a finer interpretation of life through her experience in the subject she is teaching." Another says: "In including 'culture' under personality I know that I am simply using one very general term to describe another, but I know no other word to mean the fineness of character which adds itself to, or is the result of scholarship and general ability in some people and not in others." A third critic expresses the same idea in the comment: "I have named certain qualities that make up 'personality' but there is something over and above these qualities that enters into it. A person may have a number of admirable qualities and yet the combination be in some way displeasing, while another with qualities less admirable and with far less ability in a number of directions and no greater ability in any, may be attractive and pleasing."

A provisional description of a person with pleasing personality might be: one whose virtues and vices are so combined that they do not annoy those with whom he comes in contact, and who is possessed of some quality which satisfies and pleases.

The distinction between personality and character is that the second involves judgment of personal qualities upon a basis of their moral worth; the first upon a basis of whether their combination is pleasing. The second being a matter of principle and the first one of taste, agreement as to what is good character is probably easier than as to what is good personality. By the same sign, people generally will be more immediately sensitive to the first than to the second since judgments of taste are made directly while those of principle are made indirectly.

The guide to the development of personality will have to be a list of personal characteristics of a desirable sort with their opposites set over against them, together with undesirable mani-

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festations of the virtues enumerated and irritating displays of deficiencies. The critic teacher, or whatever person bears responsibility for developing pleasing personality must diagnose each particular case in terms of such a list and try, by addition and subtraction of types of conduct, to produce a pleasing result. The proceeding will have to be empirical for the present, for no one knows just how self-possessed a person may be and in what ways he may show it without being irritating; no one knows the ways in which sympathy may be shown without being offensive. The knowledge of defects of personality and their treatment will have to be built up as the knowledge of the symptoms of disease and the treatment of disease have been built up by the medical profession. The accumulated knowledge in the first case will be as voluminous and as useful as it is in the second, and the hope for more scientific diagnosis and treatment is equal in the two.

F. L. Clapp[1] gives the following list as representing the ten qualities (in order of their frequency) that represent the composite judgment of 100 experienced schoolmen as to the composition of the "teaching personality":

1. Sympathy
2. Personal Appearance
3. Address
4. Sincerity
5. Optimism
6. Enthusiasm
7. Scholarship
8. Vitality
9. Fairness
10. Reserve or dignity

Dr. Bagley, in commenting on Clapp's results, suggests an answer to the question which troubles critic teachers as to whether the factors which enter into personality can be modified and improved. He says:[2]

"The important results of this study is the evidence that it offers against the fatalistic notion that the important factors in the teacher's personality are not improvable through the discipline of experience and training. There are undoubtedly some individuals who could never improve their manner of meeting people, (their 'address'), and there are others perhaps who could never make their 'personal appearance' more attractive. Still others, it is clear, are natural pessimists, and neither experience nor train-

[1] See Bagley's *School Discipline*, Ch. III.
[2] Ibid, p. 33.

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ing nor inspiration could transform their gloom and oppression into 'optimism' and 'enthusiasm.' Still others are naturally undignified and can have no commanding influence over their fellows. They lack 'reserve' and can never create it. Some, too, are naturally unfair, or weak in vitality, or deficient in sympathy. But after all acknowledgment has been made to the fatalists, it must still be admitted that most individuals can change and improve these various qualities. Knowing what factors 'count' in a teaching personality, the beginning teacher, under wise supervision, may adopt measures that will work what might seem at the outset to be little less than a miracle of transformation. * * * Mr. Clapp found very clear evidence that both experience and training had a positive effect in improving the 'teaching personality'."

It rests with the critic teachers to exercise the "wise supervision" which shall assist students in normal schools to bring about the modification of peronality which shall fit them for teaching. It is a supervision which cannot be successful if it is mechanical; which calls for extraordinary resourcefulness on the part of the critic teacher. A statement of the manner of such supervision is made by Miss Anna Morse, first-grade critic teacher at Charleston, Illinois, as a part of her answer to the question as to how critic teachers seek to modify and to improve the work of student teachers. Miss Morse says:

"In the few cases where I think I have really done something in this regard, it has been because I have had energy, will, feeling and persistence in getting near enough to the real life of the pupil teacher to make her care (partly because I cared) to grow toward her ideals and to raise them in the meanwhile."

It is the necessity for the combination of traits that Miss Morse mentions that makes the position of critic teacher so hard to fill satisfactorily. It is the presence of these traits in a high degree in the critic teachers which makes the work of the training school effective.

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VII.

SUMMARY.

The theses established by the material presented are:

1. Wider and more diversified use of the training departments in schools for the professional preparation of teachers is an essential step in the professionalizing of these schools.

2. Integration of the work of the training school with the work of other normal-school departments will insure the direction of the efforts in all departments to preparation for teaching; will afford to students opportunity for types of contact with the training school, which will have both immediate value and value as preparation for practice teaching.

3. A detailed analysis of the purposes which training departments propose to accomplish is necessary as a source of guidance in the work of the training school.

4. The methods for accomplishing the desired results must be devised with due consideration given to the utilization of the laws of learning. Particularly must ability in self criticism be developed in student teachers that the law of effect may be operative in improvement of teaching both in the practice period and after graduation from the normal school.

5. Training-school facilities and organization must be such that wider use is possible and that carefully directed work can be carried out.

Theoretical instruction, however well given, can at best but teach about teaching. Only by experiences involving responsible activity in teaching situations can teaching skill be increased. The theoretical instruction weights the chances in favor of effective responses to teaching problems, but the opportunity for multiple response under a specialized supervision which shall at once hasten

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successful performance on the part of the student teacher and protect the pupils who are in the practice class is a necessary antecedent to fully responsible, less closely supervised teaching by the beginning teacher.

The danger that constant contact with the training department may make students "rule of thumb" teachers, doing work in a mechanical, unreflective way, is to be guarded against by progressive increase of the responsibility carried by the student teacher, and a corresponding advance in theoretical knowledge which shall make possible the intelligent bearing of new responsibilities. Insistence that the novice must learn to teach by teaching does not involve the assumption that no other activity in the normal school can contribute to the preparation of teachers, nor yet the assumption that every teaching activity can be so definitely predicted and prepared for that "training," in its restricted sense, can be a satisfactory means of preparing teachers. It does seem feasible to insist that certain teacher activities can most economically be made largely mechanical, particularly on the side of classroom management, not as a first step in mechanizing the whole process but to the end that relieved from the necessity for reflective attention to such matters of routine, the teacher may have free all of his intellectual resources for carrying on the prime business of the classroom—instruction—which can never be mechanized but the ever new problems of whether can be prepared for by breadth of knowledge of subject matter, by mastery of educational theory in its broadest possible aspects, by experience in similar situations which have resulted in ease, readiness, and resourcefulness, and which have reduced the possibility of faulty modes of attack upon a new problem though the precise manner of the right response has never been worked out because the exact situation has never occurred.

So to strengthen the position of the training department among the normal-school departments will in no wise weaken the position of the other departments. With the integration of all departments, whatever works to the advantage of one will contribute to the strength of all. Popular interest, national necessity,

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professional attention of a high order, are all uniting to emphasize the importance of professional preparation of teachers for public schools of all grades. Normal schools have a rare opportunity to show themselves professional schools fully alive to the demands which they must meet if confidence in their ability to cope with the situation is to be maintained.

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VITA

Lester MacLean Wilson, born December 15, 1886, at Lamar, Missouri.

Academic Training: Public schools of Kansas and Nebraska; Park College Academy, Parkville, Missouri; Park College, A.B. 1906; University of Chicago, A.M. 1909; University of Wisconsin 1912-13; Teachers College, Columbia University 1918-19.

Professional Training: Teacher of Science, Wayland Academy, Beaver Dam, Wisconsin, 1906-08; Teacher of Psychology and Education, Normal Department, University of Porto Rico, Rio Piedras, P.R., 1909-12; Assistant in Psychology, University of Wisconsin, 1912-13; Teacher of Psychology, Wisconsin State Normal School, Whitewater, 1913-14; Teacher of Psychology, Eastern Illinois State Normal School, Charleston, 1915-

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